# Installer's Pocket Guide

# Guía de Bolsillo Para el Instalador




S-C-INSTALL22

# **Index/**Indice



## Concrete Connectors and Anchors



## Holdowns and Tension Ties



## Strong-Wall®



## Bases and Caps



## Solid Sawn Joist Hangers



## Engineered Wood and Structural Composite Lumber Connectors



## Plated Truss Connectors



## Masonry Connectors



## Straps and Ties



## Deck Connectors



## Miscellaneous



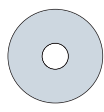
## Anchoring and Fastening Systems for Concrete and Masonry



## Fastening Systems

# Connectors: Types of Nail Holes
Conectores: Tipos de Agujeros de Clavo

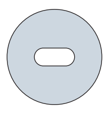


**Round**
Redondo

- **Purpose:**
  To fasten a connector.
- **Fill Requirements:**
  Always fill, unless otherwise noted.

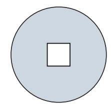
- **Propósito:**
  Para fijar un conector.
- **Requisitos para Llenar:**
  Llénelo siempre, salvo que se indique lo contrario.



**Obround**
Alargado

- **Purpose:**
  To make fastening a connector in a tight location easier.
- **Fill Requirements:**
  Always fill, unless otherwise noted.

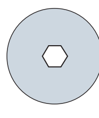
- **Propósito:**
  Para fijar un conector en una locación apretada con el fin de facilitar el trabajo.
- **Requisitos para Llenar:**
  Llénelo siempre, salvo que se indique lo contrario.



**Square**
Cuadrada

- **Purpose:**
  To fasten a connector.
- **Fill Requirements:**
  Always fill, unless otherwise noted.

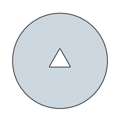
- **Propósito:**
  Para fijar un conector.
- **Requisitos para Llenar:**
  Llénelo siempre, salvo que se indique lo contrario.



**Hexagonal**
Hexágono

- **Purpose:**
  To fasten a connector to concrete or masonry.
- **Fill Requirements:**
  Always fill when fastening a connector to concrete or fastening a connector with masonry screws.

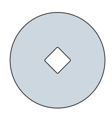
- **Propósito:**
  Para fijar un conector a concreto o mampostería.
- **Requisitos para Llenar:**
  Siempre llénelo al fijar un conector a concreto o al fijar un conector con tornillos de mampostería.



**Triangular**
Triangular

- **Purpose**:
  To increase a connector's strength or to achieve maximum strength.
- **Fill Requirements:**
  When the designer specifies max. nailing.

- **Propósito:**
  Para aumentar la fuerza de un conector o para lograr una fuerza máxima.
- **Requisitos para Llenar:**
  Llénelo cuando el diseñador lo especifica clavado "Máx."

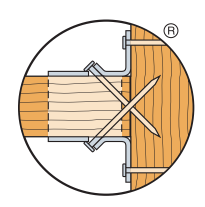


**Diamond**
Diamante

- **Purpose:**
  To temporarily fasten a connector to make installing it easier.
- **Fill Requirements:**
  None.

- **Propósito:**
  Para fijar temporalmente un conector, con el propósito de facilitar su instalación.
- **Requisitos para Llenar:**
  Ninguno.

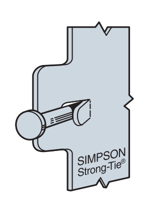


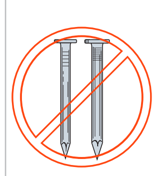



**Double-Shear Nailing**

Clavado de Doble Penetración

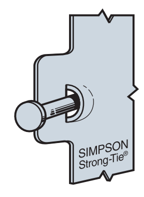
- **Purpose:**
  Installed into the joist and header, to distribute the load through two points on each joist nail for greater strength. Must use full-length nail unless 2½" nail approved by designer.
- **Fill Requirements:**
  Always fill.
- **Propósito:**
  Instalado en la vigueta y la cabecera, para distribuir la carga a través de dos puntos en cada clavo de vigueta para mayor resistencia. Debe usar un clavo de largo completo a menos que un clavo de 2½" esté aprobado por el diseñador.
- **Requisitos para Llenar:**
  Llénelo siempre.



**DO NOT use short (1½") nails for double-shear nailing.**

NO usen los clavos cortos de 1½" para uso de doble penetración.

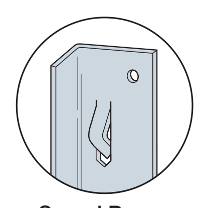



**Dome Nailing**

Clavado con Cúpula

- **Purpose:**
  To guide the nail into the joist and header at a 45° angle.
- **Fill Requirements:**
  Always fill.
- **Propósito:**
  Con este dispositivo se guían el clavo en lavigueta y la viga cabezal en ángulo de 45°.
- **Requisitos para Llenar:**
  Llénelo siempre.

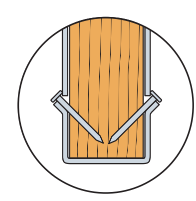


**Speed Prongs**

Dientes Rápidos

- **Purpose:**
  To temporarily position and secure the connector for easier and faster installation.
- **Fill Requirements:**
  None.
- **Propósito:**
  Se usan para colocar el conector y fijarlo temporalmente, con el fin de facilitar y hacer más rápida su instalación.
- **Requisitos para Llenar:**
  Ninguno.



**Positive-Angle Nailing**

Clavado Efectivo en Ángulo

- **Purpose:**
  To use when wood splitting may occur, and to speed installation.
- **Fill Requirements:**
  Always fill.
- **Propósito:**
  Se usa cuando la madera puede rajarse oabrirse y con el propósito hacer más rápida la instalación.
- **Requisitos para Llenar:**
  Llénelo siempre.

## QUESTIONS?

¿PREGUNTAS?

**1 (800) 999-5099 or visit strongtie.com**

The information in this guide shows contractors how our Simpson Strong-Tie® products should be correctly installed. It is not intended for use by Designers. It is important that users of this guide also follow any installation guidelines specified by the Designer and refer to the current Simpson Strong-Tie *Wood Construction Connectors* catalog for other crucial installation information.

Esta guía tiene como objetivo servir como herramienta de referencia rápida para facilitar la correcta instalación de los productos Simpson Strong-Tie®. Es importante que los usuarios sigan todas las pautas de instalación especificadas por el diseñador y consulten el catálogo de *Conectores para Construcciones de Madera* de Simpson Strong-Tie para obtener más información importante sobre la instalación.

# Fasteners/Clavos




0"
½"
1"
1½"
2"
2½"
3"
3¼"
3½"

**0.162" x 3½"** (16d common)

**Straps, heavy hangers, plated truss and SCL connectors.**

Cintas, soporte de viga pesadas, para cerchas y madera composito.

**0.162" x 2½"** (N16)

**3x wood nailers. NOT for double-shear nailing unless approved by designer.**

Clavadoras de madera 3x. NO para clavado de double penetración salvo que así lo apruebe el diseñador.

**0.148" x 3¼"** (16d sinker)

**Straps, hangers, header fastening.**

Cintas, soporte de viga.

**0.148" x 3"** (10d common)

**Straps, hangers, header fastening.**

Cintas, soporte de viga.

Same uses

Mismo uso

# **Fasteners/**Clavos




0" ½" 1" 1½" 2" 2½" 3" 3¼" 3½"

**0.148" x 2½"**

**Collated 3x wood nailers. NOT for double-shear nailing unless approved by designer.**

Clavadoras de madera 3x en sarta. NO para clavado de double penetración salvo que así lo apruebe el diseñador.

**0.148" x 1½" (N10)**

**2x joist nailing. Caution: Load reduction if used as header nails.**

***Galvanized nail shown.***

Clavado de vigas 2x. Cuidado: Reduce la capacidad si se usa en la viga cabezal.

*Se muestra un clavo galvanizado.*

**0.131" x 2½" (8d common)**

**Rafter ties.**

"Clips" de huracán.

**0.131" x 1½" (N8)**

**Light-duty framing anchors and some rafter ties.**

***Galvanized nail shown.***

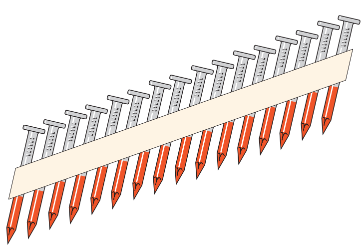
Conectores ligeros y "clips" de huracán.

*Se muestra un clavo galvanizado.*

**When using stainless-steel connectors, use ring-shank stainless-steel nails of the same size. When using ZMAX®/ hot-dip galvanized connectors, use fasteners galvanized per ASTM A153.**

Cuando use conectores de acero inoxidable, use clavos de acero inoxidable de vástago de anillo del mismo tamaño. Cuando use conectores galvanizados por inmersión en caliente/ZMAX®, use sujetadores galvanizados según ASTM A153.



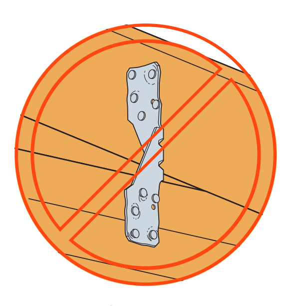



**Power-driven collated nails can be used only if:**

1. **Correct diameter and length**
2. **Correct quantity is installed**
3. **The power tool has a hole location feature (finds the hole)**
4. **Nails are not overdriven**

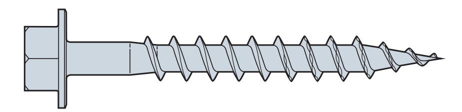
**Sólo se pueden utilizar clavos estructurales para pistola si:**

1. Diámetro y largo correctos
2. La cantidad correcta está instalada
3. La herramienta eléctrica tiene una función de ubicación de orificio (encuentra el orificio)
4. Los clavos no están demasiado ajustados



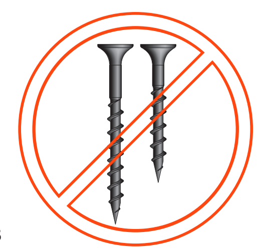
**Do Not Overdrive Nails. Do Not Drive Nails Through Connectors.**

No Se Mete Demasiado. No Se Puede. Hacer Agujeros Con Maquina.



**Strong-Drive® SD CONNECTOR screws are designed to replace nails in many popular Simpson Strong-Tie connectors. See strongtie.com/sd for information.**

Los tornillos para CONECTORES SD Strong-Drive están diseñados para reemplazar los clavos en los conectores de Simpson Strong-Tie más populares. Consulte strongtie.com/sd para obtener más información.

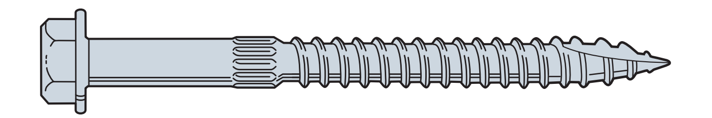


**Common screws, such as wood and drywall screws, may NOT be used to replace NAILS in connectors.**

NO se puede usar tornillos comunes, tales como tornillos para madera y panel yeso, en vez de CLAVOS en conectores.

# **Fasteners/**Clavos



**Some connectors install with the ¼" Strong-Drive® SDS HEAVY-DUTY CONNECTOR screw**

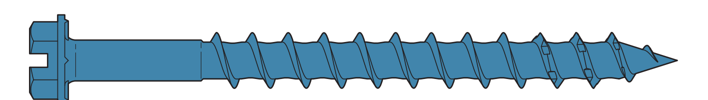
**1. Install with ⅜" hex socket or nut driver**

**2. Predrilling generally not required**

**3. Do not substitute with lag screws**

Algunos conectores se instalan con el tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼".

1. Instalar con un destornillador de casquillo hexagonal o de tuercas de ⅜"
2. Generalmente no es necesario efectuar perforaciones previas
3. No sustituir con tirafondos



**Titen Turbo™ Hex-Head Concrete and Masonry Screw**
**Diameter: 3⁄16", ¼"**

Tornillo con cabeza hexagonal para concreto y mampostería Titen Turbo
Diametro: 3⁄16", ¼"



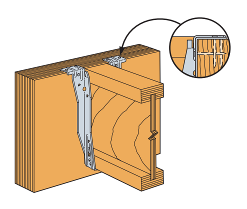
**Machine Bolt**
**Diameter: ½", ⅝", ¾", ⅞", 1"**

Perno torneado
Diametro: ½", ⅝", ¾", ⅞", 1"

# General Connector Installation
Instalación de Conectores en General

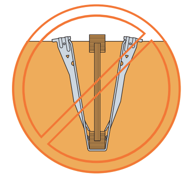



## Top-Flange Hangers
Soportes Con Ala Superior



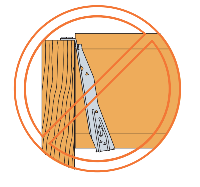
**Flush framing**

Entramado al ras



**Hanger over-spread**

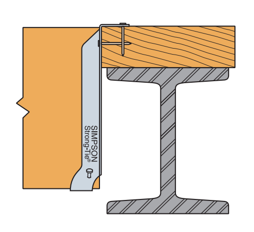
Soporte demasiado abierto



**Hanger not plumb**

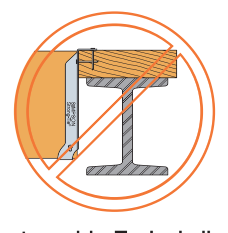
Soporte fuera de plomo

## Wood Nailers
Listones Clavadores De Madera



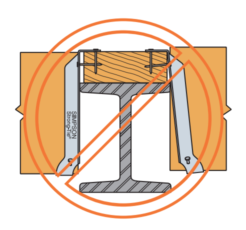

**Correct attachment**

Montaje correcto



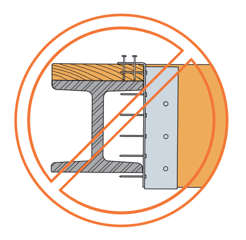
**Nailer too wide. Typical allowable overhang ¼".**

Listón clavador muy ancho. Voladizo típico permitido de ¼".



**Nailer too narrow**

Listón clavador muy estrecho

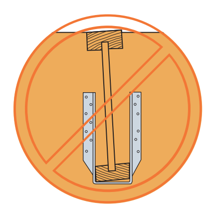


**Nailer too thin or wrong hanger for the application**

Clavadora demasiado delgada o soporte incorrecto para la aplicación

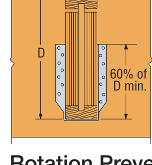



## **Prevent Rotation/**Evitar La Rotación



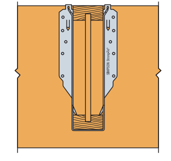
**No Rotation Resistance**

Sin resistencia al giro



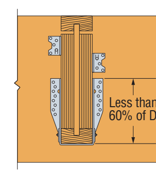

**Rotation Prevented by Hanger Height** ***(web stiffeners required)***

Prevención del giro con la altura de las viguetas *(se requieren refuerzos de alma)*



**Rotation Prevented by Lateral Flange Support**

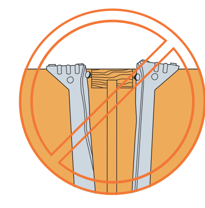
Prevención del giro con soporte lateral del ala




**Rotation Prevented by Lateral Support** ***(clips or blocking)***

Prevención del giro con soporte lateral *(clips o bloqueo)*

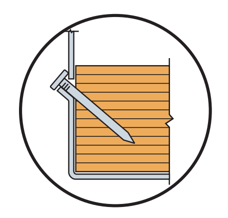
## **Toenailing/**Clavado En Diagonal



**Do not toenail I-joists before installing top-flange or face-mount hangers**

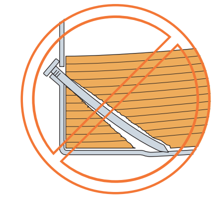
No clave en ángulo las viguetas 'I' antes de montar los soportes *(con o sin ala superior)*

## **Positive-Angle Nailing**
Clavado Efectivo En Ángulo



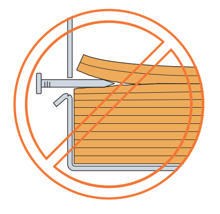
**Correct nailing approx. 45° angle**

Clavado correcto aproximadamente a 45°



**Nail too long**

Clavos demasiado largos



**Nail at wrong angle**

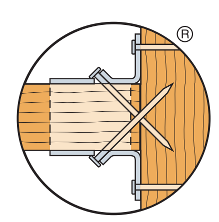
Clavado con un ángulo incorrecto



# General Connector Installation
Instalación de Conectores en General

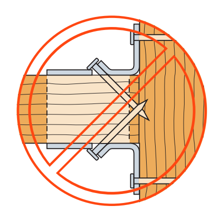



## Double-Shear Nailing
Clavado De Doble Penetración



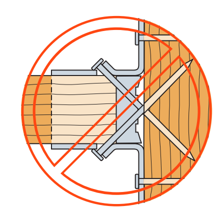
**Must use full-length nail unless 2½" nail approved by designer.**

Debe usar un clavo de largo completo a menos que un clavo de 2½" esté aprobado por el diseñador.



**Shorter nails may not be used as double-shear nails.**

No se pueden utilizar clavos más cortos como clavos de doble penetración.



**No gaps larger than ⅛".**

No hay espacios mayores a ⅛".




## BPS-LBPS

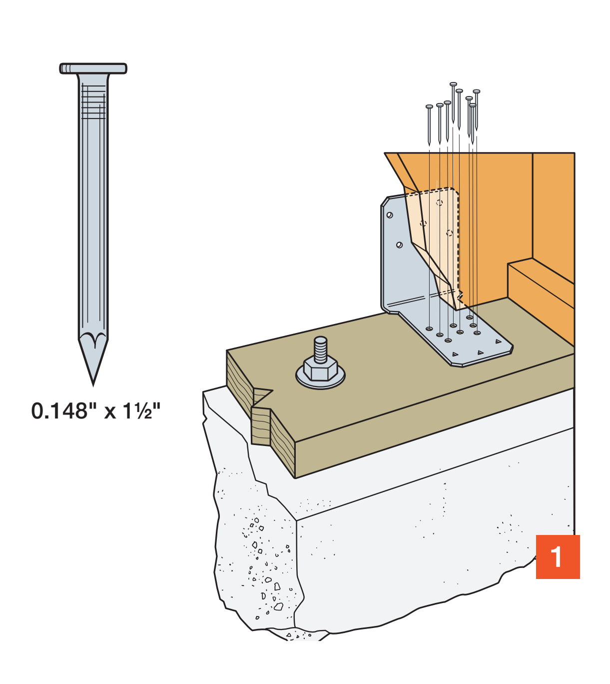
1

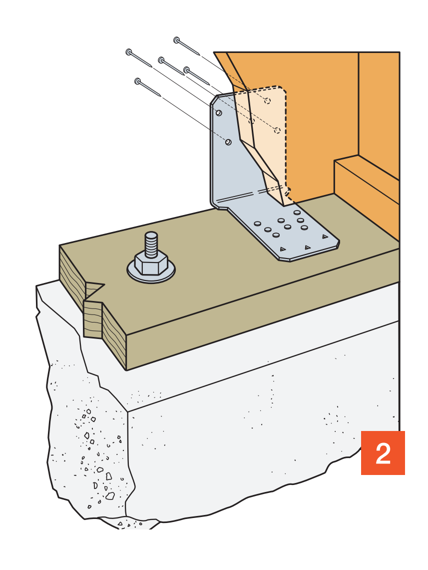
2

3

# FWANZ



# MAB — Block/Bloque




1

0.148" x 1½"

2

3

3/4"

4

# MAB – Concrete/Concreto




1

2

3

4

5




6

7

0.148" x 1½"

# MASA




**Nail duplex nails into top of form board.**
Los clavos duplex se insertan en la parte superior de la tabla para encofrado.

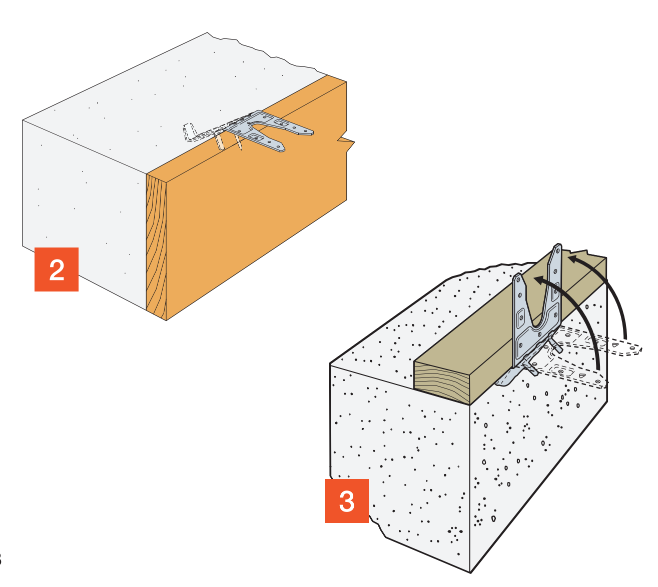
**or**/ó

0.131" x 2½"

0.148" x 3"

(2)
Duplex nails /
Clavo duplex
or/ó
(1) 0.148" x 3"

1





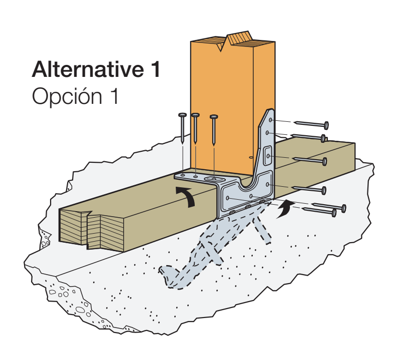

4

5

**Connector**
Conector

0.148" x 1½"

**Alternative 1**
Opción 1



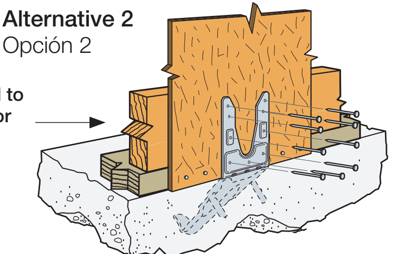
**Reduced loads apply; check with designer.**

Se aplican cargas reducidas; consulte al diseñador.

**Alternative 2**
Opción 2

**Blocking required attached to sill with A35Z (not shown) or per designer.**

Se debe adjuntar un bloqueo al larguero con A35Z (no se muestra) o según indicaciones del diseñador.

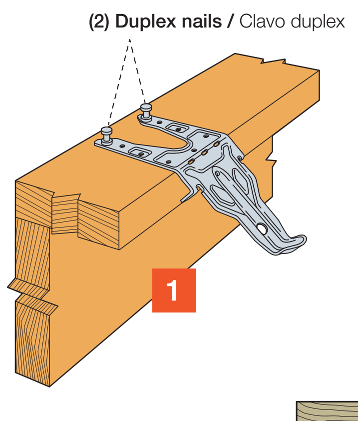


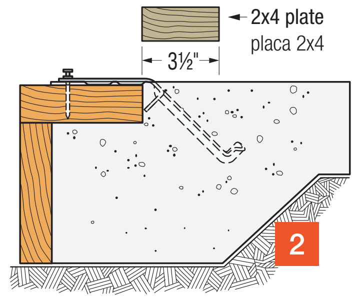
**Reduced loads apply; check with designer before nailing over sheathing.**

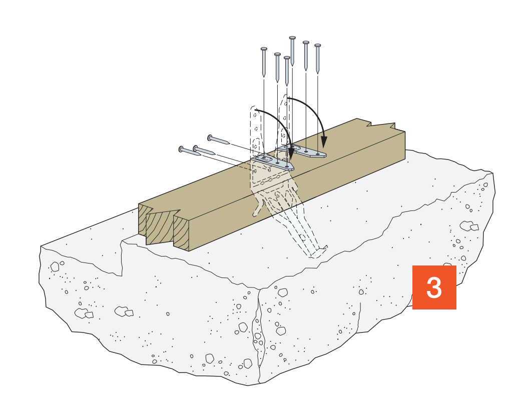
Se aplican cargas reducidas; consulte al diseñador antes de clavar sobre el relleno.




## Brick-Ledge Installation
Instalación Sobre Cornisa de Ladrillos






## Inside-the-Mudsill Installation
Instalación en Solera

**(2) Duplex nails /** Clavo duplex

1

2

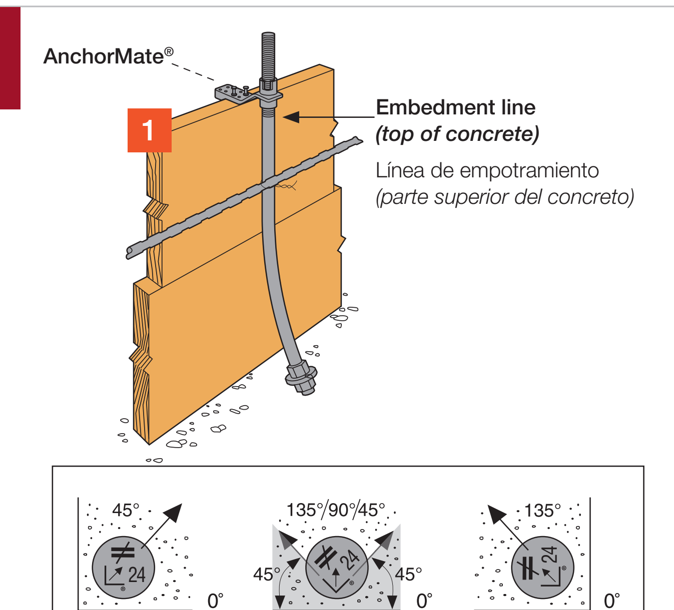
3

**Embedment line**
***(top of concrete)***

Línea de empotramiento
*(parte superior del concreto)*

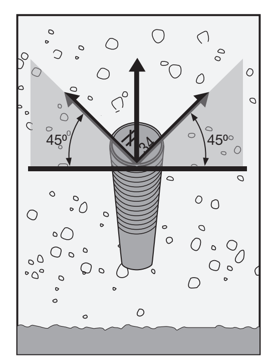
**MASAP**
similar



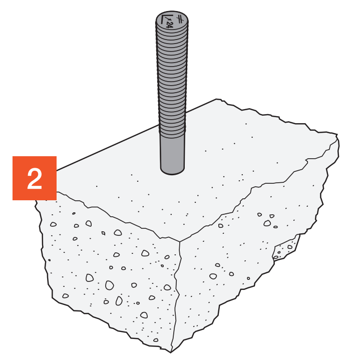

**Embedment line**
***(top of concrete)***

Línea de empotramiento
*(parte superior del concreto)*

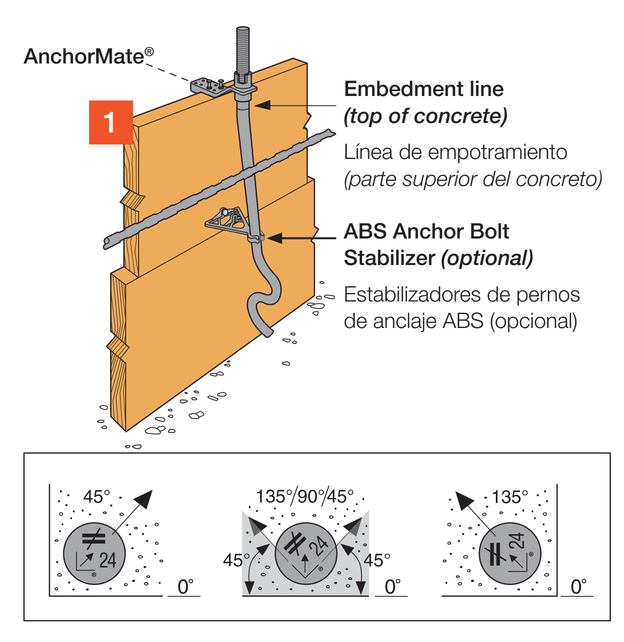


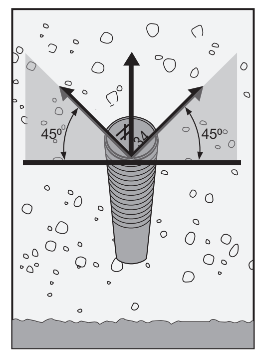

**Install a minimum 45° from either edge.**

Instalar a mínimo 45° de cada cara.



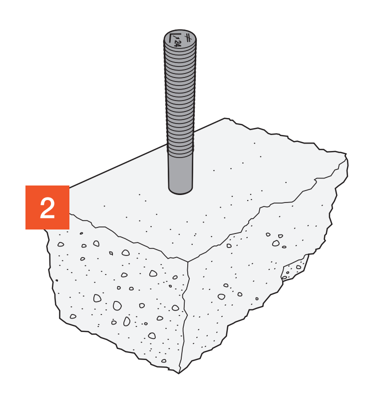



**Install 45° from either edge.**

Instalar 45° de cada cara.



# URFP




1

**Same installation for FRFP**
Misma instalación para FRFP

2

3

4

5

6

**¼" x 3" Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw (included)**
Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 3" (se incluye)

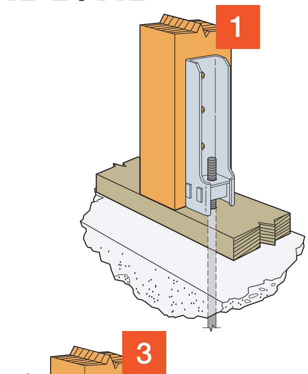
**½" x 4" Titen HD®. If using adhesive anchor, see pp. 109–110.**
Titen HD de ½" x 4". Si usa anclaje adhesivo, consulte las páginas 109–110.

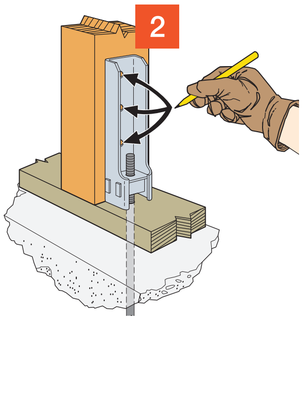


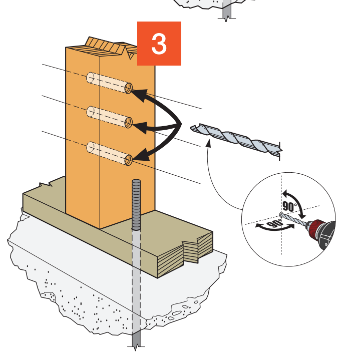


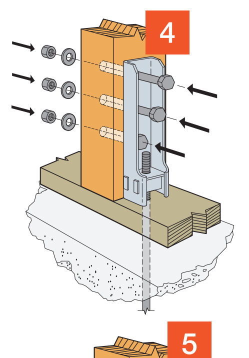

## HDB/HD

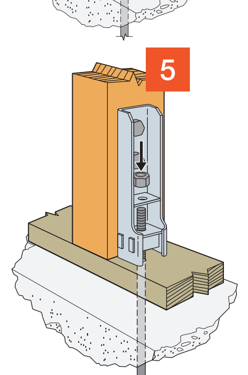
| Model No./ N.º de Modelo | Bolt Diameter/ Diámetro del Perno Torneado |
|---|---|
| HD3B | ⅝" |
| HD5B | ¾" |
| HD7B | ¾" |
| HD9B | ⅞" |
| HD12 | 1" |
| HD19 | 1" |



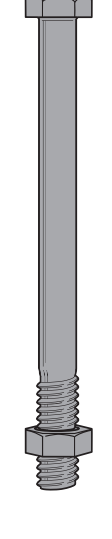




**Bolts shall be installed with the nut and washer on the opposite side of the holdown.**

Se deben instalar los pernos con la tuerca y la arandela en lado opuesto del amarre.

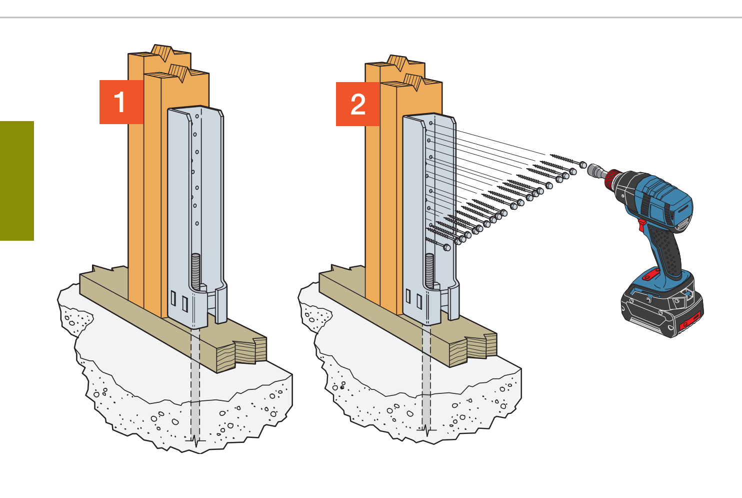
**Bolt holes must be a minimum of 1⁄32" and a maximum of 1⁄16" larger than bolt diameter.**

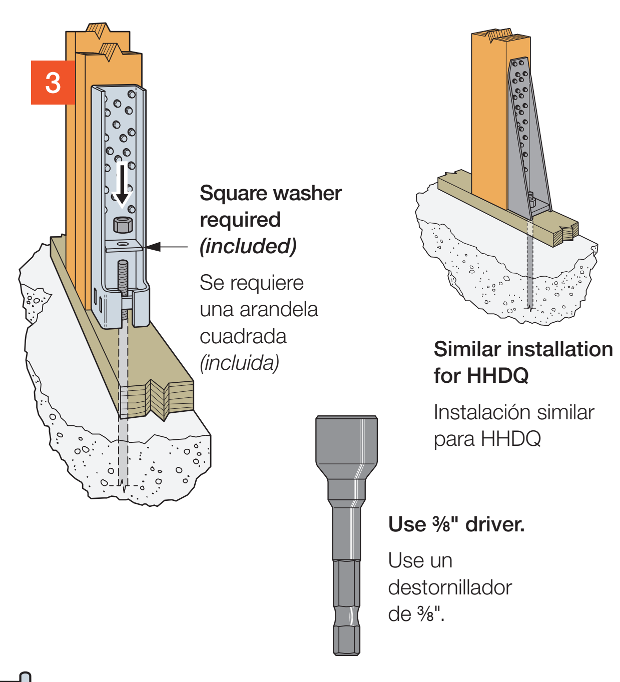
Los orificios para los pernos deben ser al menos 1⁄32" y como máximo 1⁄16" más grandes que el diámetro del perno.



# HDQ8/HHDQ




**Square washer required *(included)***

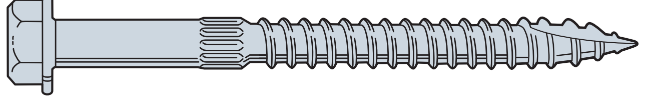
Se requiere una arandela cuadrada *(incluida)*

**Similar installation for HHDQ**

Instalación similar para HHDQ

**Use ⅜" driver.**

Use un destornillador de ⅜".



**¼" x 3" Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw (included)**

Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 3" (se incluye)




1

2

3

**Use ⅜" driver.**

Use un destornillador de ⅜".

**¼" x 2½" Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw (included)**

Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 2½" (se incluye)




HTT4
HTT5

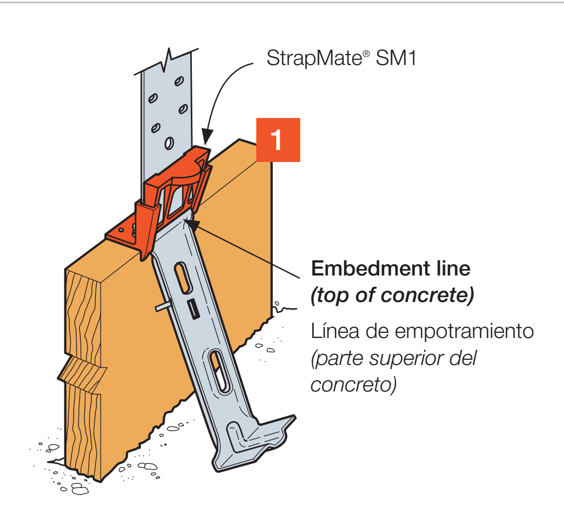
0.162" x 2½"

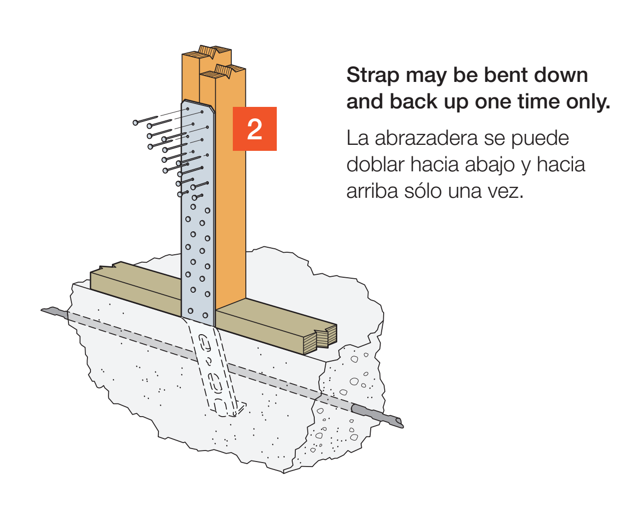
1

2

3




**16d Sinker**
**0.148" x 3¼"**
**(or 10d common 0.148 x 3")**

# LTTP2




1

2

3




# WSWH Shearwall

W

H

Max. ⅞" shim

Calce de ⅞" máximo

Install top plate as shown using SWS screws (provided)

Instale la solera superior como se muestra, usando tornillos SWS (se suministran)

Verify panel is plumb

Verifique que el panel esté a plomo

Compression nut on anchor bolt must be flush to the top surface of the concrete

La tuerca de compresión en el perno de anclaje debe quedar al ras con la superficie superior del concreto

- Tighten nuts to finger tight plus ½ turn.

  Apriete las tuercas con los dedos más ½ giro.

- 1⅝" wrench required for 1" heavy hex nut

  Se requiere una llave de 1⅝" para la tuerca hexagonal de servicio pesado de 1"

- WSWH anchor bolts extend 6½" above the concrete

  Los pernos de anclaje WSWH se extienden 6½" por encima del concreto

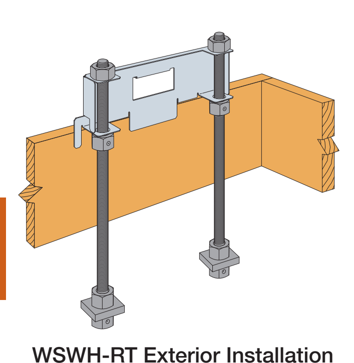
**Standard Installation**
Instalación estándar

For installation details, go to strongtie.com/wswh.

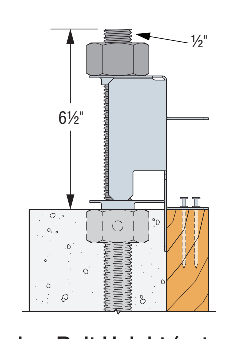
Para obtener información detallada sobre la instalación, visite strongtie.com/wswh.

# WSWH-AB



**WSWH-RT Exterior Installation**
Instalación exterior del WSWH-RT




**Anchor Bolt Height (exterior)**
Altura del perno de anclaje (exterior)

Compression nuts must be tight to the bottom of the template
Las tuercas de compresión deben quedar apretadas contra la parte inferior de la plantilla

**WSWH-RT Interior Installation**
Instalación interior del WSWH-RT

Length / Largo
6½"
$l_e$
1" 24
HS
Top of concrete
Parte superior del concreto
Heavy hex nut fixed in place on all WSWH-AB anchor bolts
Tuerca hexagonal de servicio pesado en su lugar en todos los pernos de anclaje del WSWH-AB
Heavy hex nut
Tuerca hexagonal de servicio pesado
Plate washer
Arandela de solera
Heavy hex nut
Tuerca hexagonal de servicio pesado

**WSWH-AB**

½"
6½"
1½"

**Anchor Bolt Height (Interior)**
Altura del perno de anclaje (interior)




# ABA

1

2

3

4

**If using an adhesive anchor, see pp. 109–110 for instructions. See p. 111 for Titen HD® instructions.**

Si utiliza un anclaje adhesivo, consulte las instrucciones de las páginas 109–110. Consulte la página 111 para obtener instrucciones acerca de los tornillos Titen HD.

**0.162" x 3½" — ABA46, ABA46R, ABA66, ABA66R**

**0.148" x 3" — ABA44, ABA44R**

# ABU — Nails/Clavos




1

2

3

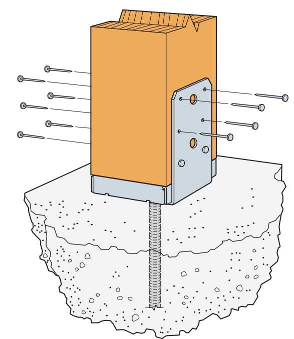
4

5

0.162" x 3½"

**If using an adhesive anchor, see pp. 109–110 for instructions. See p. 111 for Titen HD® instructions.**

Si utiliza un anclaje adhesivo, consulte las instrucciones de las páginas 109–110. Consulte la página 111 para obtener instrucciones acerca de los tornillos Titen HD.






1

2

3

4

5

**If using an adhesive anchor, see pp. 109–110 for instructions. See p. 111 for Titen HD® instructions.**

Si utiliza un anclaje adhesivo, consulte las instrucciones de las páginas 109–110. Consulte la página 111 para obtener instrucciones acerca de los tornillos Titen HD.




6

7

8

**Bolt Diameter: ½"**
**Length:**
**ABU44/ABU46 = 4½"**
**ABU66 = 6½"**

**Bolt holes must be a minimum of 1⁄32" and a maximum of 1⁄16" larger than bolt diameter.**

Perno Torneado
Diámetro: ½"
Largo:
ABU44/ABU46 = 4½"
ABU66 = 6½"

Los orificios para los pernos deben ser al menos 1⁄32" y como máximo 1⁄16" más grandes que el diámetro del perno.

# ABW




0.148" x 3"

1

2

3

4

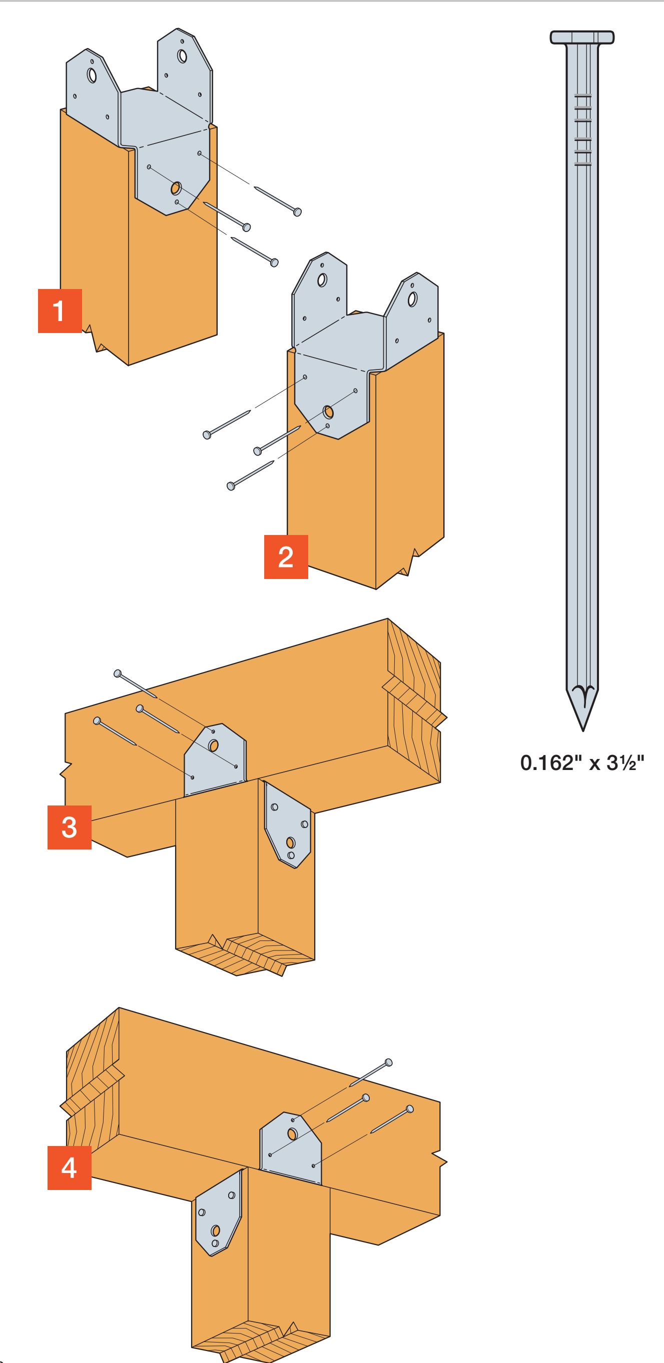
5

6

7

# BC

SIMPSON Strong-Tie



# BCS2-2/4




0.148" x 3"

1

2

3

4

# BC40




1

2

3

0.162" x 3½"




1

Similar CBS Installation (typ.)

Instalación similar de CBS (típ.)

3" min.

3" min.

2

3" side cover (min.)

Cubierta lateral de 3" (mín.)

3

# CB/CBS




3" side cover (min.)

Cubierta lateral de 3" (mín.)

3" min. 3" min.

4

5

6

Bolt

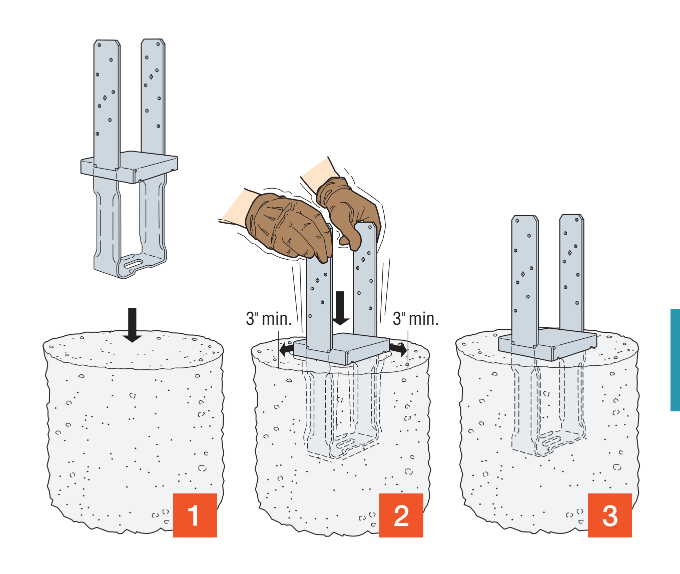
Perno

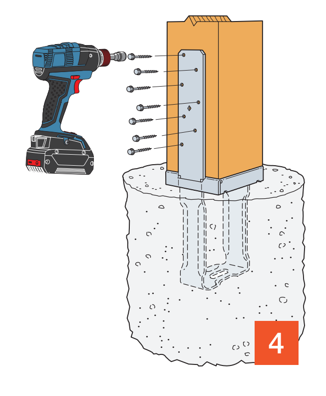
| Model No. / N.º de Modelo | Bolt Size / Tamaño del Perno |
|---|---|
| CB44 | ⅝" x 4½" |
| CBS44 | ⅝" x 4½" |
| CB46 | ⅝" x 4½" |
| CBS46 | ⅝" x 4½" |
| CB48 | ⅝" x 4½" |
| CB64 | ⅝" x 6½" |
| CB66 | ⅝" x 6½" |
| CBS66 | ⅝" x 6½" |
| CB68 | ⅝" x 6½" |
| CB86 | ¾" x 8½" |
| CB88 | ¾" x 8½" |
| CB1010 | ¾" x 10½" |
| CB1012 | ¾" x 10½" |
| CB1212 | ¾" x 11½" |

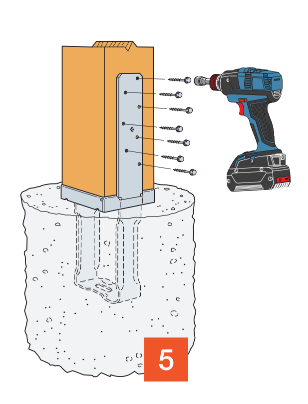
**Bolt holes must be a minimum of 1⁄32" and a maximum of 1⁄16" larger than bolt diameter.**

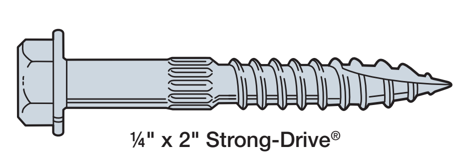
Los orificios para los pernos deben ser al menos 1⁄32" y como máximo 1⁄16" más grandes que el diámetro del perno.



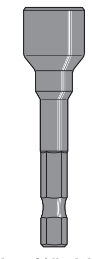



**¼" x 2" Strong-Drive®**
**SDS HEAVY-DUTY CONNECTOR Screw**
Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 2"



**Use ⅜" driver.**

Use un destornillador de ⅜".




1

2

90°

90°

3

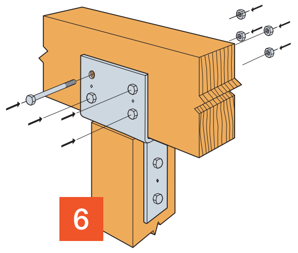
4

Bolt
Perno

90°

90°

5



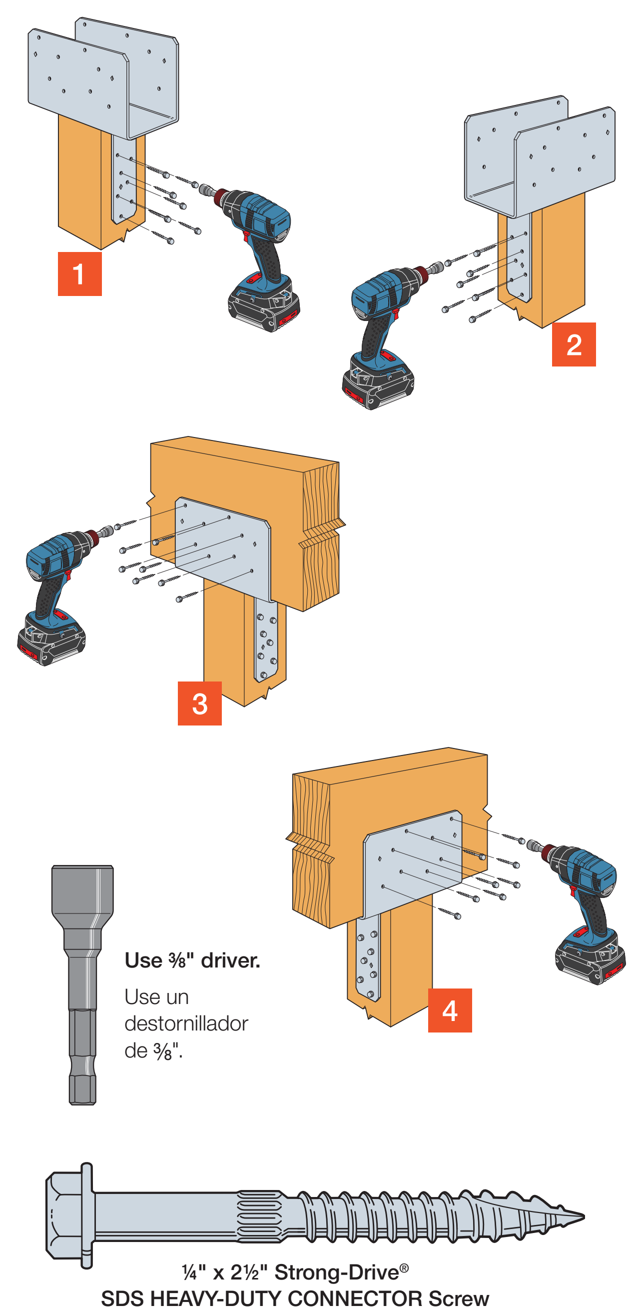

| Beam or Column Width<br>Ancho de Dintel o de Columna | Bolt Size<br>Tamaño del Perno Torneado | |
|---|---|---|
| | Diameter<br>Diámetro | Length<br>Longitud |
| 3⅛" | ⅝" | 4½" |
| 3½" | ⅝" | 4½" |
| 5⅛" | ¾" | 6½" |
| 5½" | ⅝" | 6½" |
| 6¾" | ¾" | 8" |
| 7" | ¾" | 8" |
| 7½" | ¾" | 8½" |
| 8¾" | ¾" | 10" |
| 9½" | ¾" | 10½" |

**Bolt holes must be a minimum of 1/32" and a maximum of 1/16" larger than bolt diameter.**

Los orificios para los pernos deben ser al menos 1/32" y como máximo 1/16" más grandes que el diámetro del perno.

# CCQ

SIMPSON Strong-Tie




**Use ⅜" driver.**

Use un destornillador de ⅜".

**¼" x 2½" Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw**

Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 2½"




1

2

3

4

5

6

7

8

9

10

**If using an adhesive anchor, see pp. 109–110 for instructions. See p. 111 for Titen HD® instructions.**

Si utiliza un anclaje adhesivo, consulte las instrucciones de las páginas 109–110. Consulte la página 111 para obtener instrucciones acerca de los tornillos Titen HD.

# LCE4



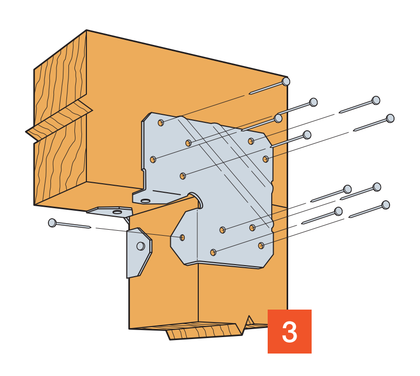

0.162" x 3½"

4x
Beam
Viga

4x4
Post
Poste

1

2



# PB




1

2

0.162" x 3½"

2" min. side cover

2" min. side cover

3

4

5

# PCZ/EPCZ




1

2

3

4

1

2

3

4

0.148" x 3"




**Mark drill holes.**

Marque los agujeros a taladrar.

1" min.

1" min.

6" min.

1

**Drill ¼"-diameter hole ½" deeper than Titen Turbo™.**

Perdore un afujero de ¼" de diámetro a una profundidad de ½" mayor que el Titen Turbo.

2

3

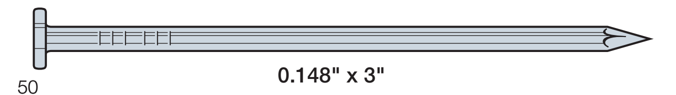
4

5

6

**For installation in concrete, use Titen Turbo masonry screw ¼" x 1¼".**

Para instalaciones en concreto, utilice tornillo con mampostería Titen Turbo de ¼" x 1¼".



**0.148" x 3"**

# PPBF




1

1" min.

1" min.

6" min.

2

3

4

5

0.148" x 1 ½"

# RPBZ




1

2

**3½" side cover (min.)**

Cubierta lateral de 3½" (mín.)

3

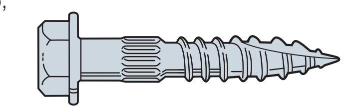
4

5

6

**If using an adhesive anchor, see pp. 109–110 for instructions. See p. 111 for Titen HD® instructions.**

Si utiliza un anclaje adhesivo, consulte las instrucciones de las páginas 109–110. Consulte la página 111 para obtener instrucciones acerca de los tornillos Titen HD.



**¼" x 1½" Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw**

Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 1½"




# HUS

1

2

3

**Fill all round holes**

Llene todos los orificios redondos

4

5

0.162" x 3½"




1

2

3

0.148" x 3"

4

# LRU




1

3

2

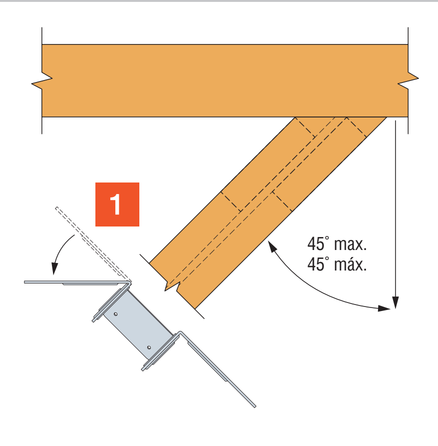
4

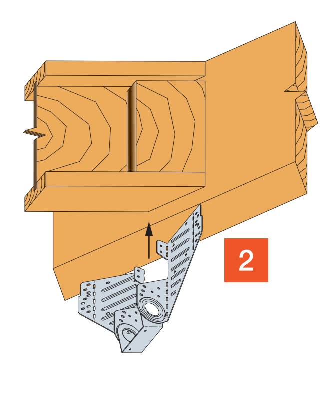
0.162" x 3½"

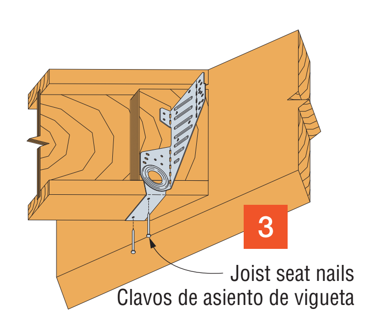
5

# LSSR


SIMPSON
Strong-Tie


1
45˚ max.
45˚ máx.


2


3
Joist seat nails
Clavos de asiento de vigueta




4

Acute side nailing
Clavado
lateral agudo

Joist nails on
obtuse side
Clavos de vigueta en
el lado obtuso

5

6

7

<table>
<tr><th rowspan="2">Model No.<br>N.º de<br>Modelo</th><th colspan="2">Fasteners / Sujetadores</th></tr>
<tr><th>Face (in.)<br>Frontal (pulg.)</th><th>Joist (in.)<br>Vigueta (pulg.)</th></tr>
<tr><td>LSSR1.81Z</td><td rowspan="7">0.148 x 2½</td><td rowspan="7">0.148 x 1½</td></tr>
<tr><td>LSSR2.1Z</td></tr>
<tr><td>LSSR2.37Z</td></tr>
<tr><td>LSSR2.56Z</td></tr>
<tr><td>LSSR26Z</td></tr>
<tr><td>LSSR28Z</td></tr>
<tr><td>LSSR210Z</td></tr>
<tr><td>LSSR210-2Z</td><td rowspan="2">0.162 x 2½</td><td rowspan="2">0.162 x 2½</td></tr>
<tr><td>LSSR410Z</td></tr>
</table>

# LUCZ




**Header**
Viga Cabezal

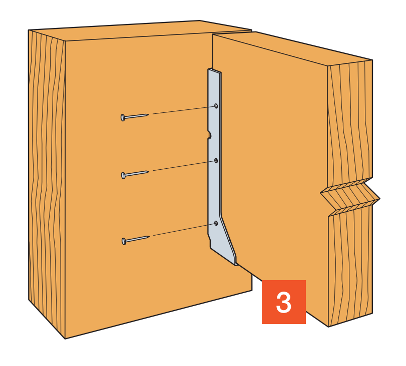
**Joist**
Viga

0.148" x 1½"

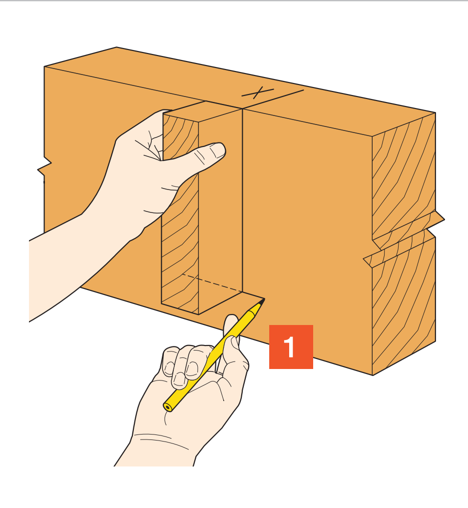
0.162" x 3½"

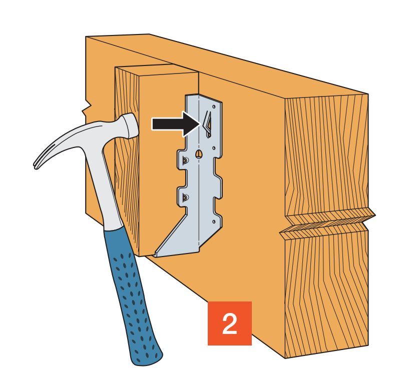
1

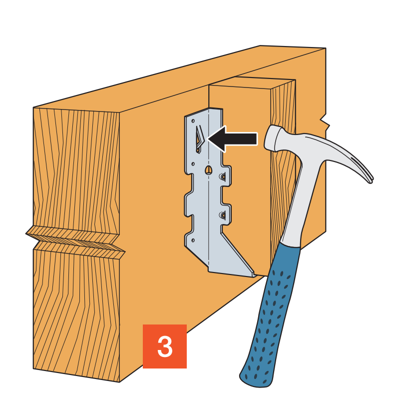
2




SIMPSON
Strong-Tie


1


2


3

# LUS




4

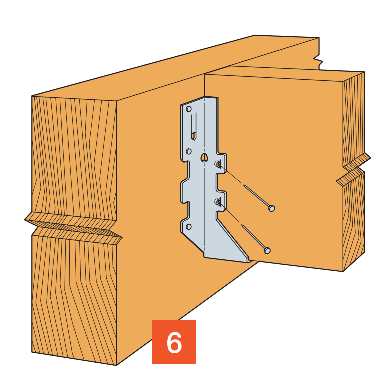
5

**0.148" x 3" for single 2x.**

0.148" x 3" para un solo 2x.

**0.162" x 3½" for all others.**

0.162" x 3½" para los demás.



# SUR/L




0.162" x 3½"

0.148" x 1½"

1

2

0.162" x 3½"

3

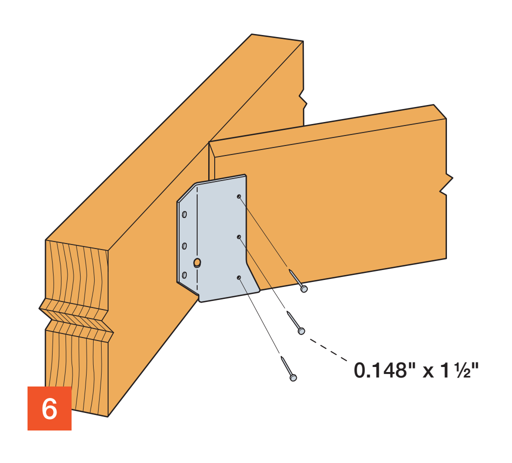



4

0.162" x 3½"

5

0.148" x 1½"



# VPA




0.148" x 3"

0.148" x 1½"

0.148" x 3"

1

Adjust to required pitch.

Inclinación requerida.

2

0.148" x 3"

3







0.148" x 1½"

4

0.148" x 1½"

5

**2x Rafter**

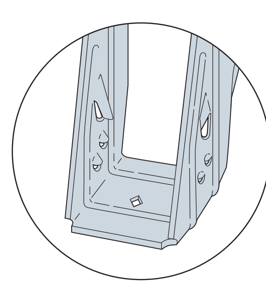
Viga 2x

**I-Joist Rafter**

Viga de vigueta en I




# ITS



**The Strong-Grip™ seat allows the I-joist to “snap” in securely — no joist nails needed.**

El asiento Strong-Grip™ permite que la viga ‘I’ “encaje” con firmeza; no se necesitan clavos para vigas.

90°

1

2

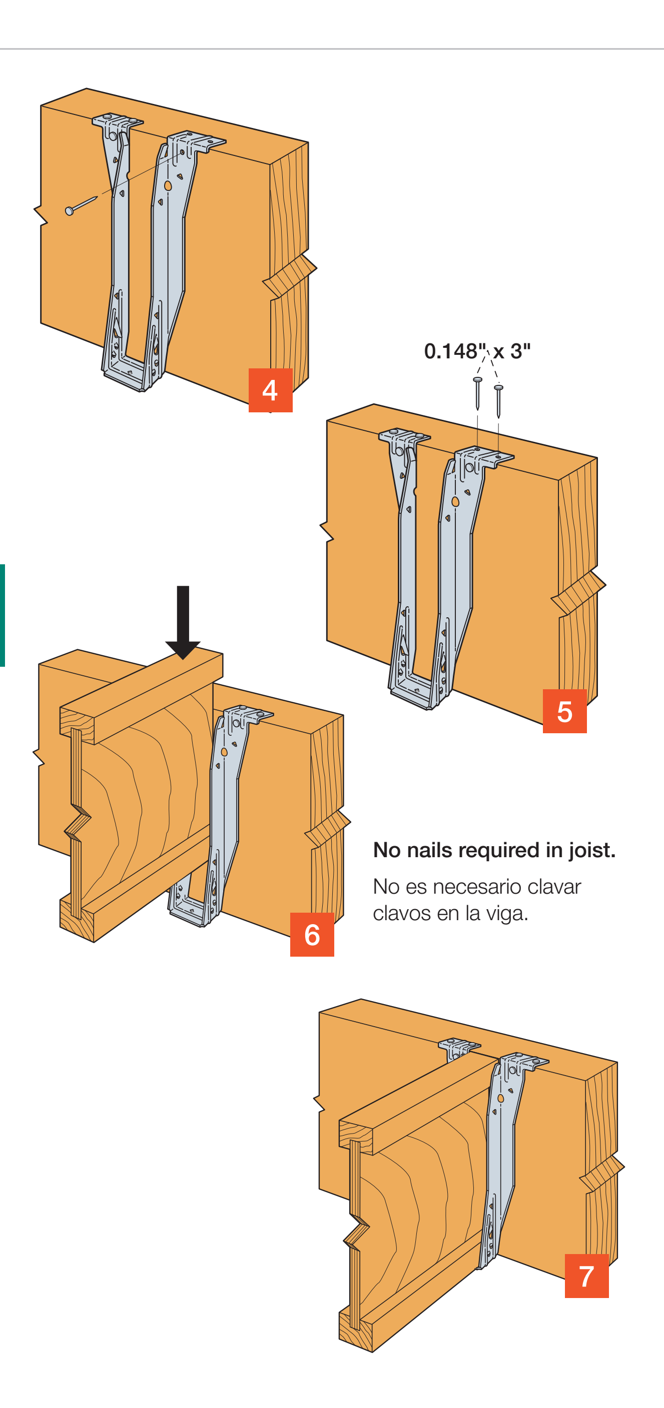
0.148" x 3"

3



0.148" x 3"

SIMPSON Strong-Tie




**No nails required in joist.**

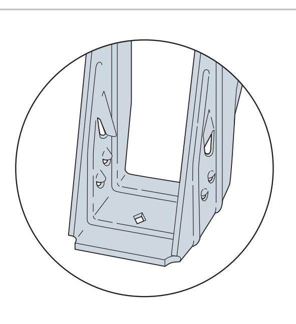
No es necesario clavar clavos en la viga.

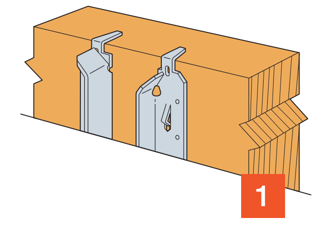
# IUS

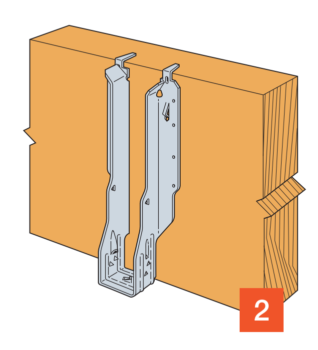


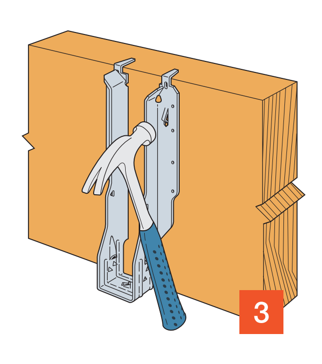

**The Strong-Grip™ seat allows the I-joist to “snap” in securely — no joist nails needed.**

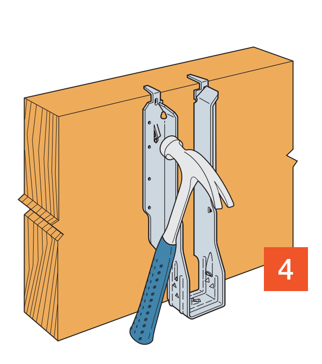
El asiento Strong-Grip™ permite que la viga en ‘I’ “encaje” con firmeza; no se necesitan clavos para vigas.

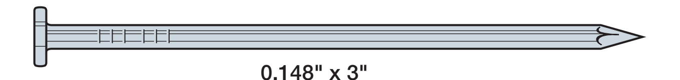




0.148" x 3"




5

6

7

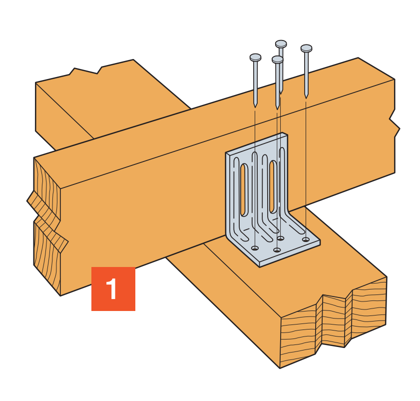
**No nails required in joist.**

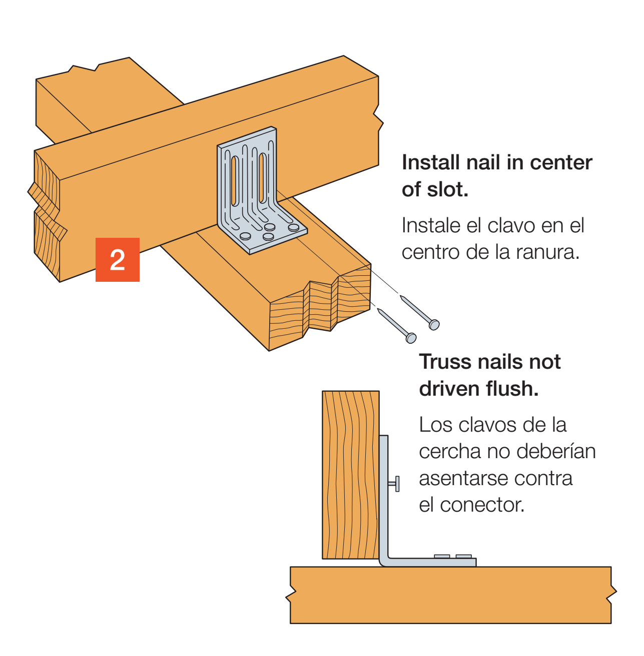
No es necesario clavar clavos en la viga.

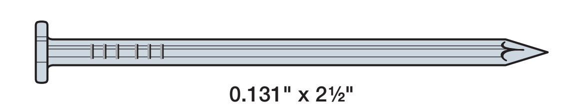
8


SIMPSON
Strong-Tie

# DTC


1


2
**Install nail in center of slot.**
Instale el clavo en el centro de la ranura.
**Truss nails not driven flush.**
Los clavos de la cercha no deberían asentarse contra el conector.



0.131" x 2½"

# STC/STCT




0.131" x 1½"

1

2

Gap

**Install nail in center of slot.**

Instale el clavo en el centro de la ranura.

**Truss nails not driven flush.**

Los clavos de la cercha no deberían asentarse contra el conector.

**See p. 117 for Strong-Drive® SDPW Deflector Screw**

Consulte la página 117 para información acerca del tornillo deflector Strong-Drive SDPW

# HTU




1

0.162" x 3½"

0.148" x 1½"

2

0.162" x 3½"

3

0.148" x 1½"

0.148" x 3" for double 2x joists

0.148" x 3" para viguetas doubles 2x

0.162" x 3½"

4

0.148" x 1½"

5

**For double truss, use 0.148" x 3" nails into trusses.**

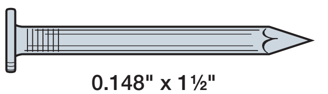
Para cerchas dobles, use clavos 0.148" x 3" insertados en las cerchas.

# TSBR




**Nailing requirement**


requisito de clavado



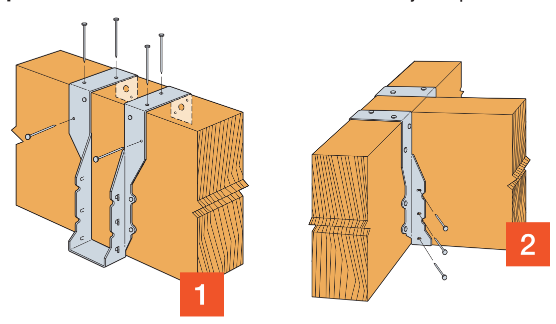
**0.148" x 1½"**

# THA Installation on Solid Header

Instalación Sobre Viga Cabezal Sólida




**Top-Mount Condition /** Condición de Montaje Superior




**Install joist nails both sides.**

Instale clavos para vigas a ambos lados.

**Face-Mount Condition /** Condición de Montaje Sobre Cara

1

2

**Install joist nails both sides.**

Instale clavos para vigas a ambos lados.

0.148" x 1½"

0.148" x 3"

0.162" x 3½"

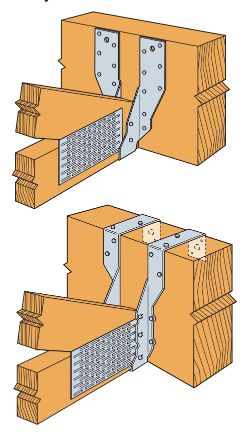
# THA




## Face-Mount Installation on Solid Header

Instalación Sobre Viga Cabezal Sólida de Montaje frontal

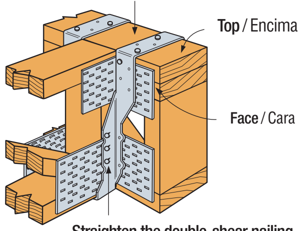
| Model<br>Modelo | Top and Face<br>Encima and Cara | Joist<br>Vigueta |
|---|---|---|
| THA29 | (16) 0.148" x 3" | (4) 0.148" x 3" |
| THA213 | (14) 0.148" x 3" | (4) 0.148" x 3" |
| THA413 | | |
| THA218 | (18) 0.148" x 3" | (4) 0.148" x 3" |
| THA218-2 | (22) 0.162" x 3½" | (6) 0.162" x 3½" |
| THA418 | | |
| THA422 | | |
| THA222-2 | | |
| THA422-2 | (30) 0.162" x 3½" | (6) 0.162" x 3½" |
| THA426 | | |
| THA426-2 | (38) 0.162" x 3½" | (6) 0.162" x 3½" |



## Installation on Truss

Instalación Sobre Cercha

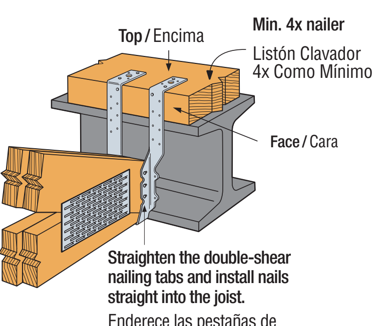
| Nail Location<br>Ubicación de Los Clavos | Qty./Nail<br>Cant./Clavo |
|---|---|
| Top/Encima | (4) 0.162" x 3½" |
| Face/Cara | (4) 0.162" x 3½" |
| Joist<br>Vigueta | Fill all holes with 0.162" x 3½"<br>Llene todos los orificios con clavos 0.162" x 3½" |




## Installation on Nailer

Instalación en Listón Clavador

| Nail Location<br>Ubicación de Los Clavos | 4x Nailer /<br>Listón Clavador 4x |
|---|---|
| Top/Encima | (4) 0.162" x 3½" |
| Face/Cara | (4) 0.162" x 3½" |
| Joist<br>Vigueta | Fill all holes with 0.162" x 3½"<br>Llene todos los orificios con clavos 0.162" x 3½" |




**See *Wood Construction Connectors* catalog for additional nailing specifications.**
Consulte el catálogo de construcción de madera para obtener especificaciones de clavado adicionales.

# THJA




1

0.162" x 3½"

2

0.162" x 3½"

3

0.148" x 1½"

4

0.148" x 1½"

**Left-hand hip installation similar.**

Similar a la instalación 'izquierda' de cumbre.

0.148" x 1½"

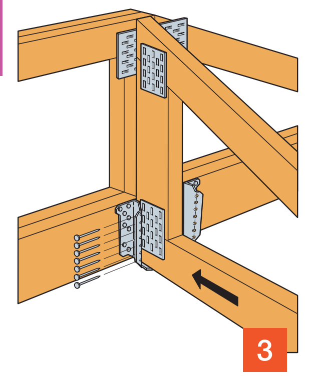
0.162" x 3½"

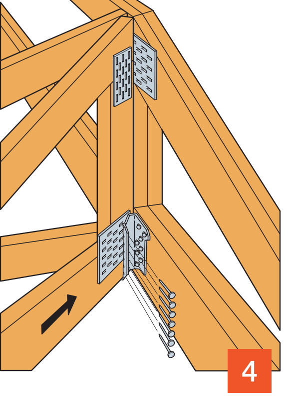
# THJU

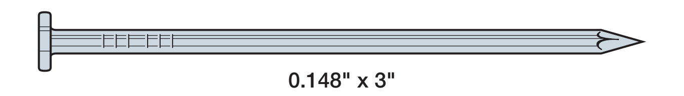



1

2



0.148" x 3"




# HETA/META

**0.148" x 1½"**
**Quantity per designer.**

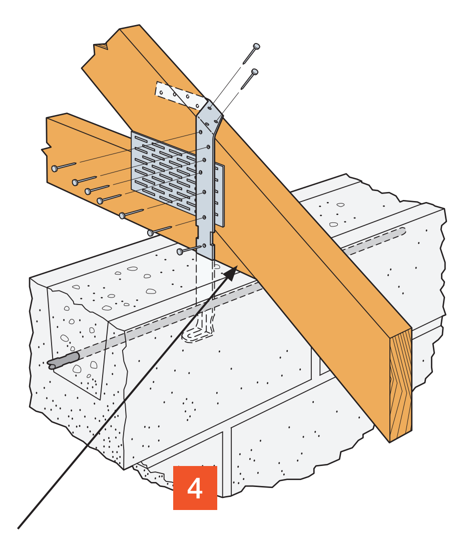
Cantidad según indicaciones del diseñador.

1

2

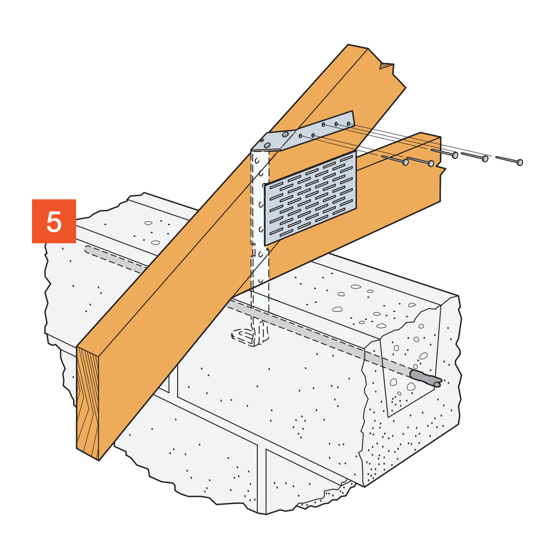
3

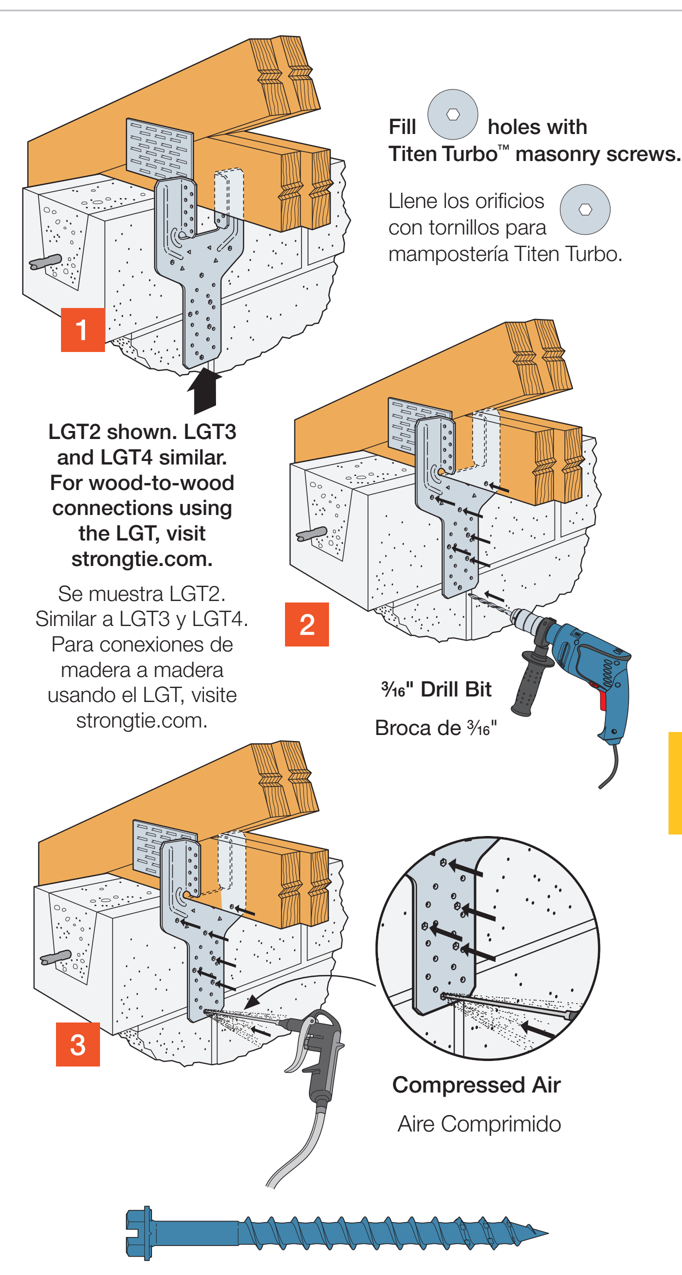



**Moisture barrier not shown (typ.)**

La barrera contra la humedad no se muestra (típ.)





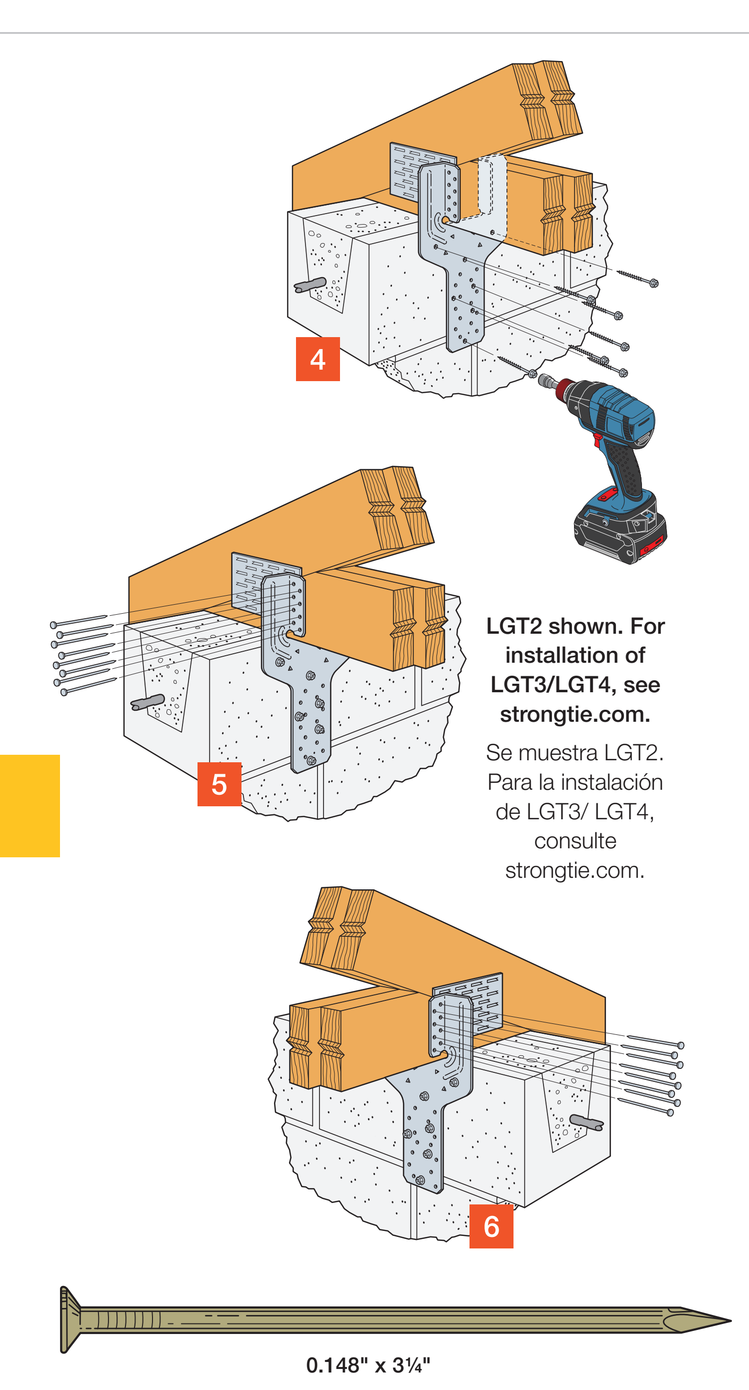

**LGT2 shown. LGT3 and LGT4 similar. For wood-to-wood connections using the LGT, visit strongtie.com.**

Se muestra LGT2. Similar a LGT3 y LGT4. Para conexiones de madera a madera usando el LGT, visite strongtie.com.

**Titen Turbo Masonry Screw (¼" x 2¼")**
**For installation in concrete, use Titen® 2¼" x 1¾".**

Tornillo para mampostería Titen Turbo (¼" x 2¼")
Para instalaciones en concreto, utilice Titen 2 de ¼" x 1¾".

SIMPSON Strong-Tie

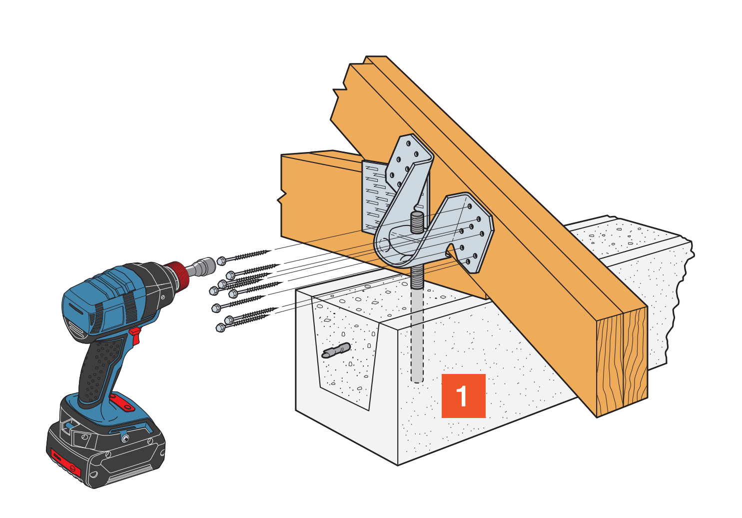


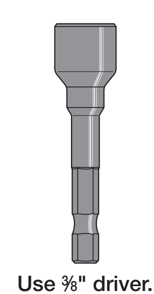

**LGT2 shown. For installation of LGT3/LGT4, see strongtie.com.**

Se muestra LGT2. Para la instalación de LGT3/ LGT4, consulte strongtie.com.

**0.148" x 3¼"**



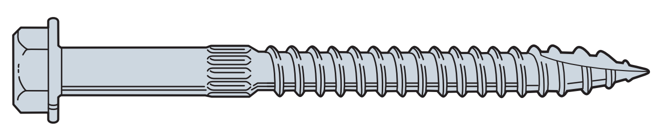



**Use ⅜" driver.**

Use un destornillador de ⅜".

**If using an adhesive anchor, see pp. 109–110 for instructions.**

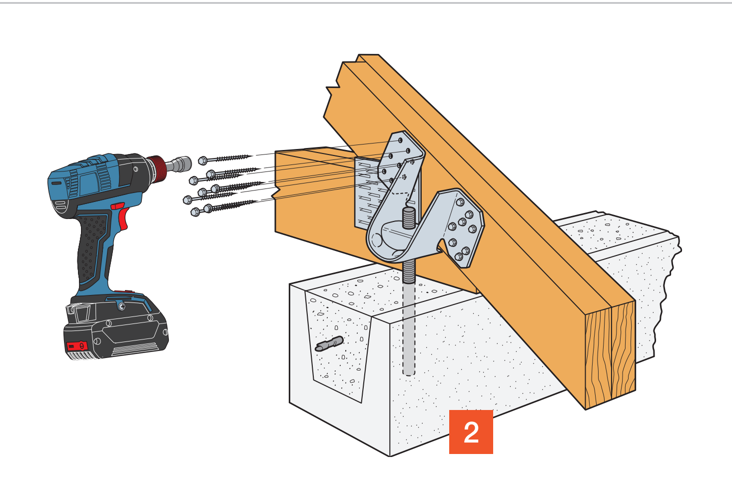
Si utiliza un anclaje adhesivo, consulte las instrucciones de las páginas 109–110.

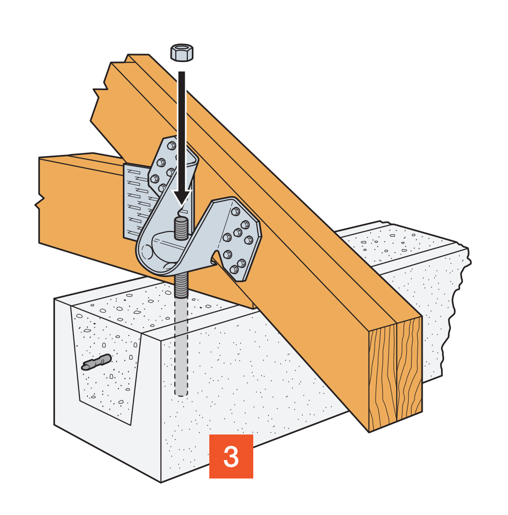


**¼" x 3" Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw**

Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 3"


SIMPSON
Strong-Tie


2


3




# A35

1

1

2

2

3

3

4

0.131" x 1½"




1

See strongtie.com/cshp for framing nailer use.

Consulte strongtie.com/cshp para el uso de clavadoras para entramados.

2

3

| Model / Modelo | Lumber Species / Especies de Madera | | | | | |
|---|---|---|---|---|---|---|
| | Douglas Fir–Larch / Southern Pine | | | Spruce-Pine-Fir / Hem-Fir | | |
| | End Length / Largo del Extremo | Cut Length / Largo a Cortar | Total Fasteners / Total de Clavos | End Length / Largo del Extremo | Cut Length / Largo a Cortar | Total Fasteners / Total de Clavors |
| CSHP18 | 10" | Clear Span (Tramo Claro) + 20" | (16) 0.131" x 2½" | 11" | Clear Span (Tramo Claro) + 22" | (18) 0.131" x 2½" |
| | 9" | Clear Span (Tramo Claro) + 18" | (14) 0.148" x 2½" | 10" | Clear Span (Tramo Claro) + 20" | (16) 0.148" x 2½" |
| CSHP20 | 8" | Clear Span (Tramo Claro) + 16" | (12) 0.131" x 2½" | 9" | Clear Span (Tramo Claro) + 18" | (14) 0.131" x 2½" |
| | 8" | Clear Span (Tramo Claro) + 16" | (12) 0.148" x 2½" | 8" | Clear Span (Tramo Claro) + 16" | (12) 0.148" x 2½" |

# CS/CMST




CS14 shown

Mostrado

1

Quantity per designer.

Cantidad según indicaciones del diseñador.

2

0.131" x 2½"

0.148" x 2½"

Sheathing not shown for clarity.

No muestra el revestimento para mayor claridad.

3

End length
Largo del extremo

No nails required here
No necesita clavos aquí

CLEAR SPAN
TRAMO CLARO

End length
Largo del extremo

CMST requires minimum (2) 2x studs

CMST requiere puntales de (2) 2x como mínimo

Provide min. 1⅝" end distance for CS and CMST

Dejar al menos 1⅝" y distancia para CS y CMST

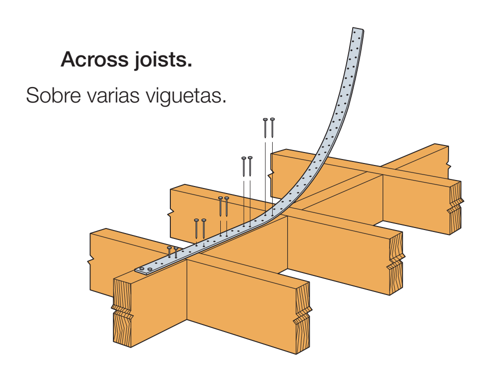
Equal number of specified nails in each end

Igual cantidad de clavos especificados en cada extremo

0.162" x 2½"

# CS/CMST




| Model / Modelo | Lumber Species / Especies de Madera | | | | | |
|---|---|---|---|---|---|---|
| | Douglas Fir–Larch / Southern Pine | | | Spruce-Pine-Fir / Hem-Fir | | |
| | End Length / Largo del Extremo | Cut Length / Largo a Cortar | Total Fasteners / Total de Clavos | End Length / Largo del Extremo | Cut Length / Largo a Cortar | Total Fasteners / Total de Clavors |
| CS14 CS14-R | 16" | Clear Span (Tramo Claro) + 32" | (30) 0.131" x 2½" | 19" | Clear Span (Tramo Claro) + 38" | (36) 0.131" x 2½" |
| | 15" | Clear Span (Tramo Claro) + 30" | (26) 0.148" x 2½" | 16" | Clear Span (Tramo Claro) + 32" | (30) 0.148" x 2½" |
| CS16 CS16-R | 13" | Clear Span (Tramo Claro) + 26" | (22) 0.131" x 2½" | 15" | Clear Span (Tramo Claro) + 30" | (26) 0.131" x 2½" |
| | 11" | Clear Span (Tramo Claro) + 22" | (20) 0.148" x 2½" | 13" | Clear Span (Tramo Claro) + 26" | (22) 0.148" x 2½" |
| CS20 CS20-R | 9" | Clear Span (Tramo Claro) + 18" | (14) 0.131" x 2½" | 9" | Clear Span (Tramo Claro) + 18" | (16) 0.131" x 2½" |
| | 7" | Clear Span (Tramo Claro) + 14" | (12) 0.148" x 2½" | 9" | Clear Span (Tramo Claro) + 18" | (14) 0.148" x 2½" |
| CMST12 | 39" | Clear Span (Tramo Claro) + 79" | (86) 0.148" x 2½" | 44" | Clear Span (Tramo Claro) + 89" | (98) 0.148" x 2½" |
| | 33" | Clear Span (Tramo Claro) + 68" | (74) 0.162" x 2½" | 38" | Clear Span (Tramo Claro) + 77" | (84) 0.162" x 2½" |
| CMST14 | 30" | Clear Span (Tramo Claro) + 61" | (66) 0.148" x 2½" | 34" | Clear Span (Tramo Claro) + 70" | (76) 0.148" x 2½" |
| | 26" | Clear Span (Tramo Claro) + 52" | (56) 0.162" x 2½" | 30" | Clear Span (Tramo Claro) + 61" | (66) 0.162" x 2½" |
| CMSTC16 | 20" | Clear Span (Tramo Claro) + 41" | (50) 0.148" x 3¼" | 25" | Clear Span (Tramo Claro) + 50" | (58) 0.148" x 3¼" |

**Note: Install half of the total fasteners in each end of strap.**

Nota: Instale la mitad de la cantidad total de sujetadores en cada extremo del fleje.

# H1 — Rafter/Cabrio




0.131" x 2½"

1

**Plate**
Placas

**Rafter**
Cabrio

0.131" x 1½"

0.131" x 2½"

0.131" x 1½"

2

0.131" x 1½"

3

4

**H1 Reversed**

H1 Invertido

# H1 – Truss/Viga




0.131" x 2½"

1

Plate
Placas

Truss
Viga

0.131" x 1½"

0.131" x 1½"

2

0.131" x 2½"

3

0.131" x 1½"

H1 Reversed

H1 Invertido

4

# H2.5A




0.131" x 2½"

1

Rafter
Cabrio

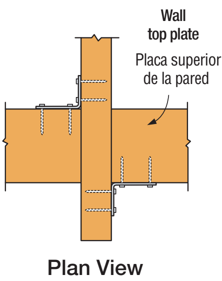
2

Truss
Viga

3

**Installations in Pairs**
Both connectors shall be same model.

**Instalaciones en Pares**
Ambos conectores deben ser del mismo modelo.




**Plan View**
Vista de Planta

**Install diagonally across from each other for minimum 2x truss.**

Instale diagonalmente uno respecto del otro para dejar una cercha de 2x como mínimo.

# H2.5T




1

Rafter
Cabrio

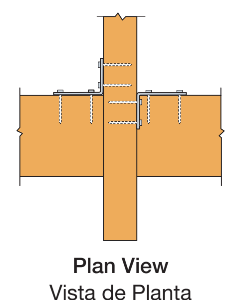
2

0.131" x 2½"

3½"

Truss
Viga

3



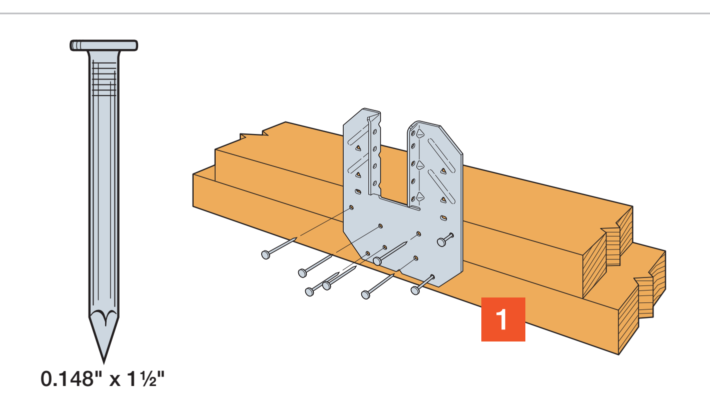
**Plan View**
Vista de Planta

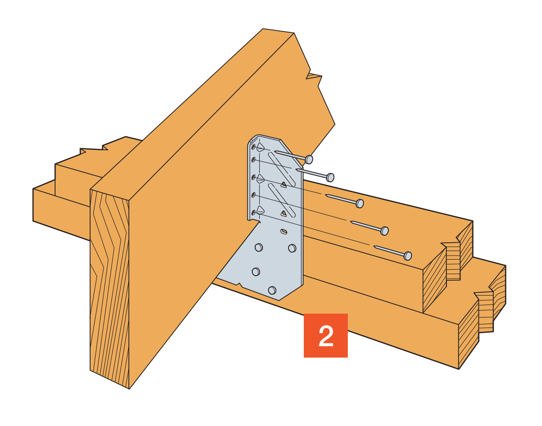
**Products can be on the same side of the wall provided they are configured as shown.**

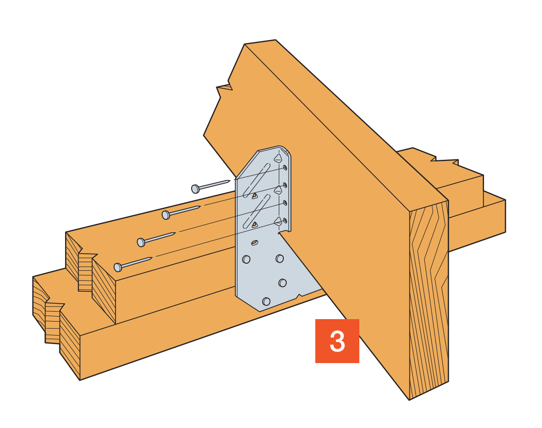
Los productos se pueden instala a ambos lados de la pared siempre que se configuren como se muestra.

# H10A – Rafter/Cabrio



# H10A – Blocking/Entramado




1

0.148" x 1½"

2

0.148" x 1½"

0.148" x 1½"

3

0.148" x 1½"

4

0.131" x 2½"

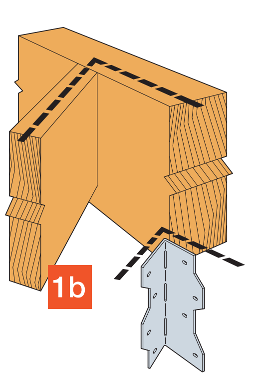
5

0.131" x 2½"

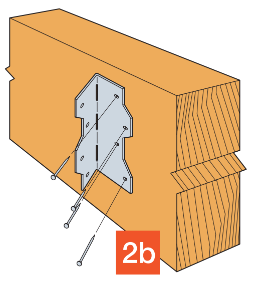
0.131" x 2½"

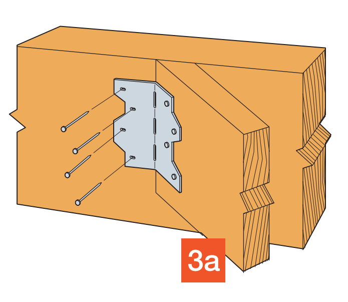


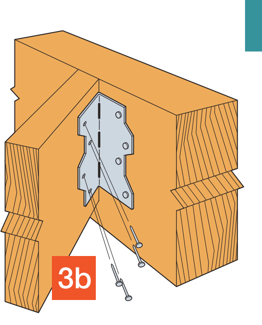

1a

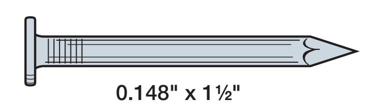



2a



0.148" x 1½"

# LSTA




1

2

3

0.148" x 2½"

# LTP4/LTP5




0.131" x 1½"

0.131" x 2½"

**Fasteners:**

**LTP4**
**No sheathing: 0.131" x 1½"**
**Over sheathing (½" thick max.): 0.131" x 2½"**

**LTP5**
**No sheathing: 0.131" x 1½"**
**Over sheathing (½" thick max.): 0.131" x 2½"**

**Sujetadores:**

**LTP4**
Sin relleno: 0.131" x 1½"
Sobre relleno (½" de espesor máx.): 0.131" x 2½"

**LTP5**
Sin relleno: 0.131" x 1½"
Sobre relleno (½" de espesor máx.): 0.131" x 2½"

# RBC




1

2

0.148" x 1½"

3

Up to ¾"

Hasta ¾"

4

# MST

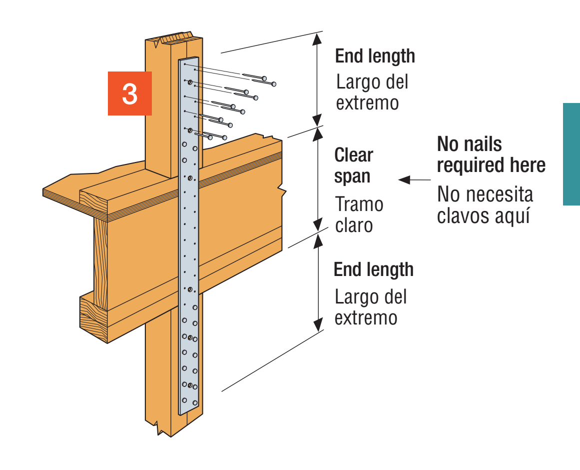



1

2

0.162" x 2½"

**No Sheathing /** Sin Relleno



# MST

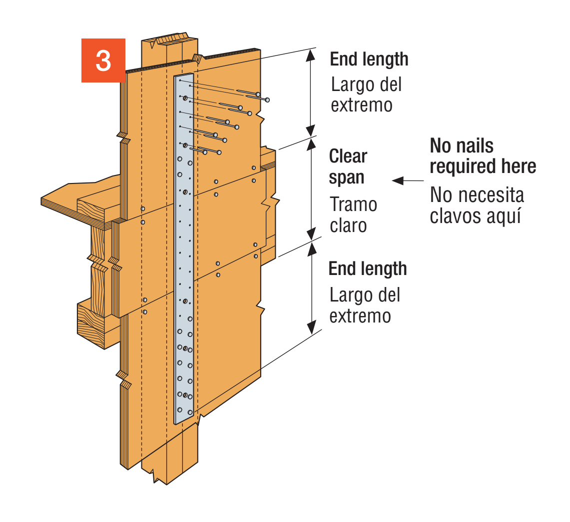



1

2

With Sheathing / Con Relleno

0.162" x 2½"



# RSP




0.131" x 1½"

1

2

3

4

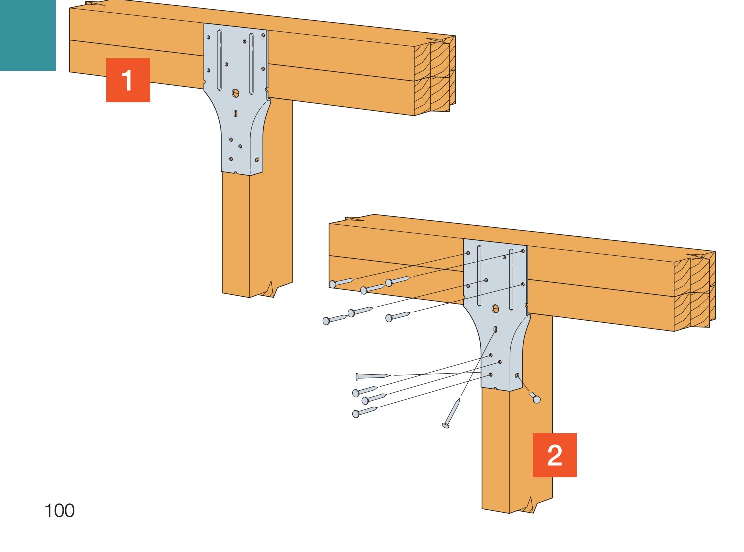
# SP1/SP2




1

2

0.148" x 3"



# SSP



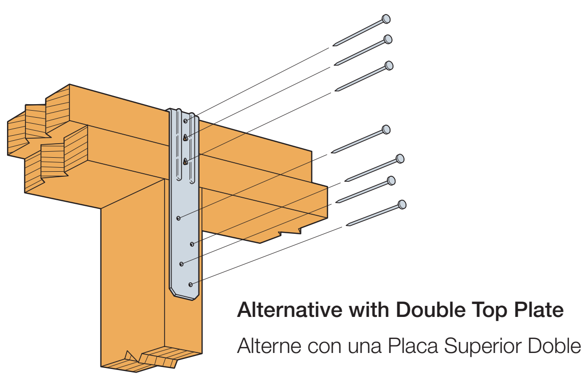

0.148" x 3"

**Installation on Mudsill**

Instalación sobre Durmientes

**Single Plate Installation**

Instalación de placa sencilla



**Alternative with Double Top Plate**

Alterne con una Placa Superior Doble

# TSP




1

2

3

0.148" x 1½"

0.148" x 3"




# DTT1Z

1

2

3

3" embedment
3" empotramiento

**Strong-Drive® SDWH TIMBER-HEX HDG Screw**

Tornillo HDG HEXAGONAL PARA MADERA SDWH Strong-Drive

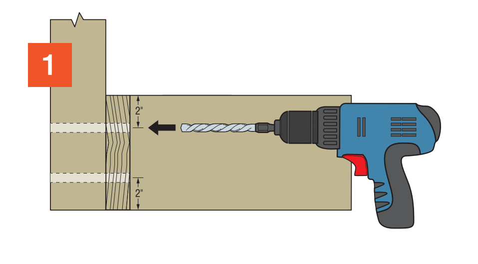


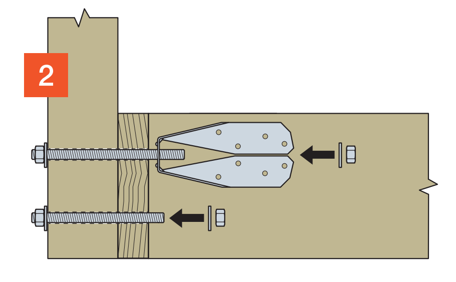
**#9 x 1½" Strong-Drive® SD CONNECTOR Screw**

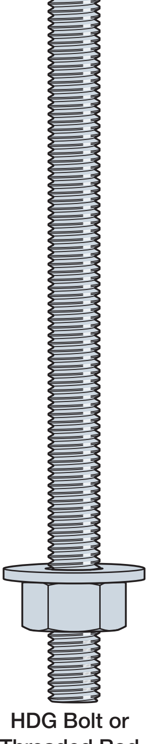
Tornillo para CONECTORES SD Strong-Drive de #9 x 1½"

# DTT2Z



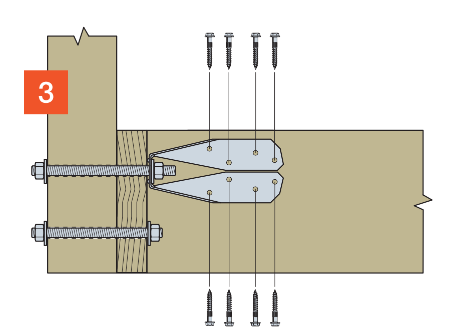



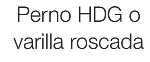



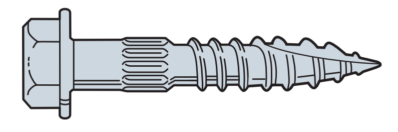



**HDG Bolt or Threaded Rod**

Perno HDG o varilla roscada





**¼" x 1½" Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw**

Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 1½"




# HSS

**Bend flanges one time only.**

Doble las alas una vez.

1

2

3

4

**Use ⅜" driver.**

Use un destornillador de ⅜".

**¼" x 1½" Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw**

Tornillo para CONECTORES DE SERVICIO PESADO SDS Strong-Drive de ¼" x 1½"

# PSPN




1

2

3

4

0.162" x 3½"

# TWB




1

2

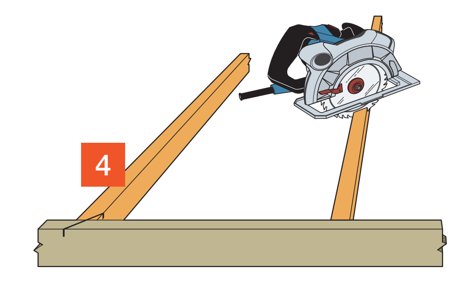
3

**0.131" x 2½" at studs /**

en los montantes

**0.162" x 3½" at plates /**

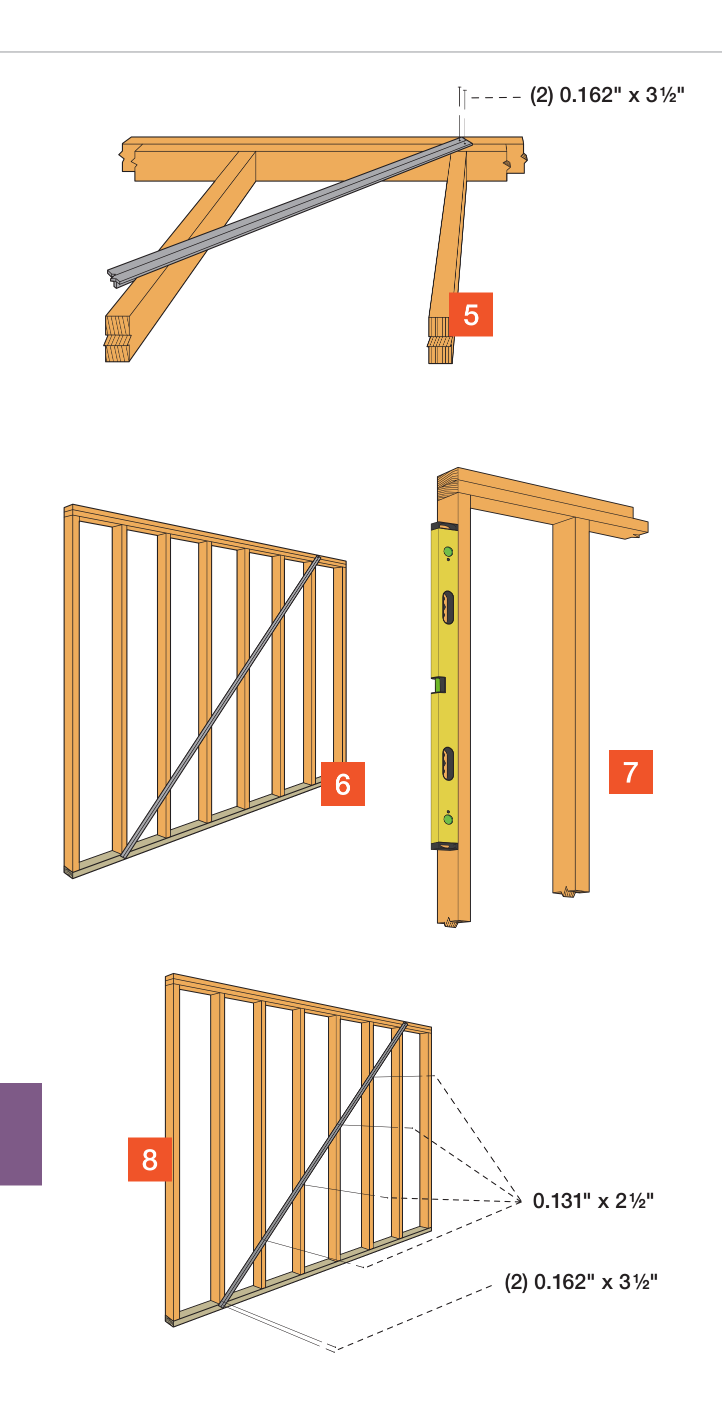
en las soleras




**Cut ⅝" kerf**

Corte un corte de ⅝"

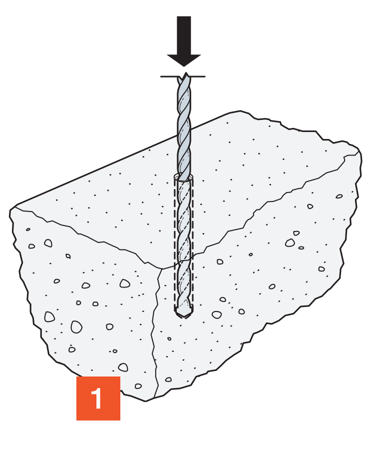
SIMPSON Strong-Tie

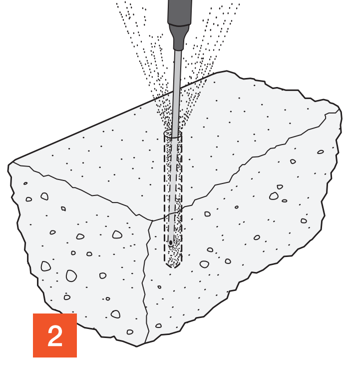





# Adhesive Anchoring / Anclaje Adhesivo

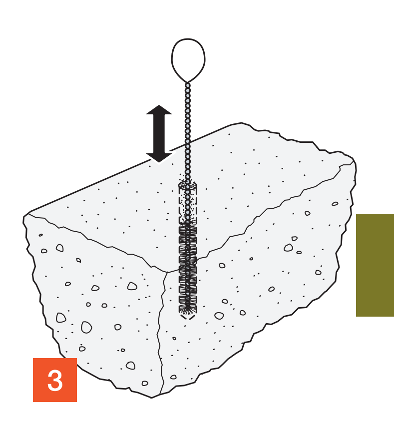
**(AT-XP®, SET-3G® and SET-XP®)**




**Compressed air (80 psi min.), 4 seconds (min.) — AT-XP, SET-XP**
**2 seconds (min.) — SET-3G**

Aire comprimido (80 psi mín.), 4 segundos (mín.) — AT-XP, SET-XP
2 segundos (mín.) — SET-3G




**Nylon brush**
**4 cycles (min.) — AT-XP, SET-XP**
**Wire brush**
**2 seconds (min.) — SET-3G**

Cepillo de nylon
4 ciclos (mín.) — AT-XP, SET-XP
Cepillo de alambre
2 segundos (mín.) — SET-3G




4

**Compressed air (80 psi min.),**
**4 seconds (min.) — AT-XP®, SET-XP®**
**2 seconds (min.) — SET-3G®**

Aire comprimido (80 psi mín.), 4 segundos (mín.) — AT-XP, SET-XP
2 segundos (mín.) — SET-3G

**Dispense until mixed properly (uniform color).**

Suministre hasta que esté bien mezclado (color uniforme).

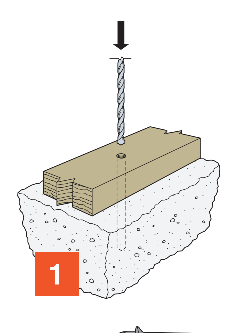
5

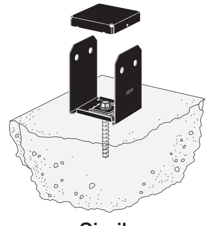
Fill ½ to ⅔
Llene ½ a ⅔

6

# Titen HD®

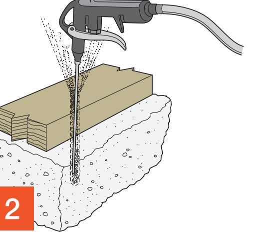


**Similar**

Similar




**Washer or bearing plate as required by building code.**

Arandela o disco de presión según lo requiera el código de construcción.

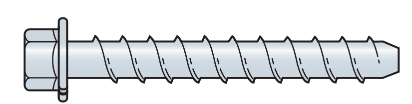
3

½" min.

| **Titen HD Diameter (in.)** Diámetro de Titen HD (pulg.) | **Hex Wrench Size (in.)** Tamaño de llave hexagonal (pulg.) |
|---|---|
| ¼ | ⅜ |
| ⅜ | 9⁄16 |
| ½ | ¾ |
| ⅝ | 15⁄16 |
| ¾ | 1⅛ |

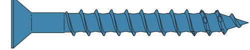
Hole size equals anchor diameter.

El tamaño del orificio es igual al diámetro del anclaje



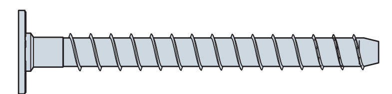
**Titen HD Heavy-Duty Screw Anchor**

Anclaje de tornillo de servicio pesado Titen HD



**Titen HD Countersunk Screw Anchor**

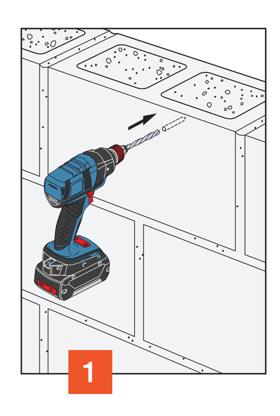
Anclaje de tornillo avellanado Titen HD

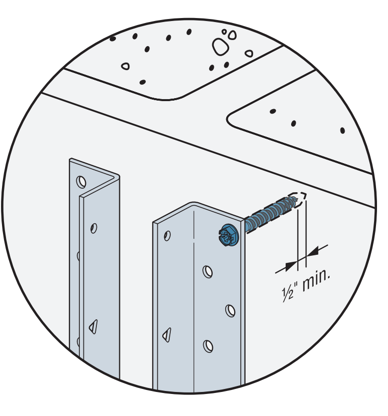


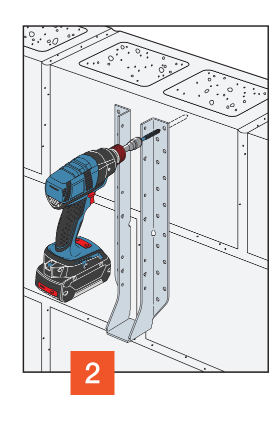
**Titen HD Heavy-Duty Screw Anchor with Washer-Head**

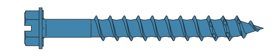
Anclaje de tornillo de servicio pesado con cabeza tipo arandela



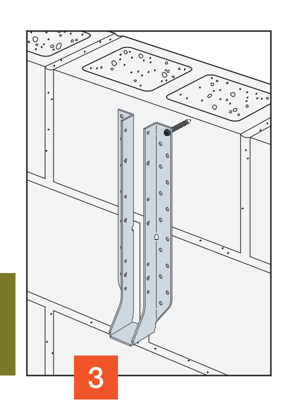



**Titen Turbo Concrete and Masonry Screw Anchor**

Anclaje de tornillo para concreto y mampostería Titen Turbo






# Strong-Drive® SDWC TRUSS Screw

**Note: SDWC Truss screws can also be installed using the Quik Stik™ Rafter and Truss Fastening System.**

Nota: Los tornillos para cerchas SDWC también se pueden instalar con el sistema de sujeción de vigas y cerchas Quik Stik™.

1

2

Optimal 22°
Óptimo 22°
15°
0°
30°
¼" max.

3

**Installation angle limit**

Límite de ángulo para instalación

3"

4

SDWC15600

5

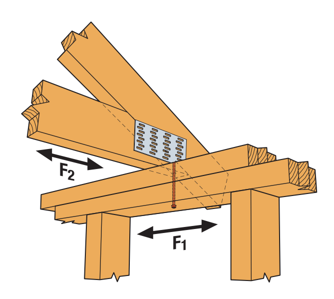
SDWC15600

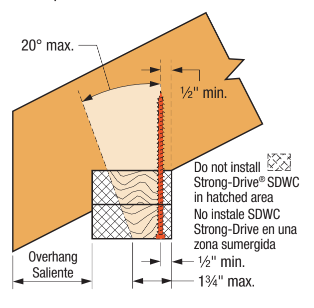
# SDWC for Rafter/Truss with Quik Stik™




## Fasten Straight Up Through Double Top Plate

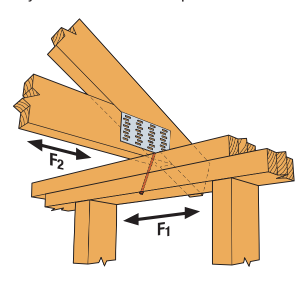
Sujete directamente a través de la solera superior doble




## Fasten from Front-Bottom Corner of Double Top Plate

Sujete desde la esquina inferior delantera de la solera superior doble




**Optional SDWC Installation — Truss Offset from Stud**

Instalación opcional del SDWC — Cercha desplazada con respecto al montante

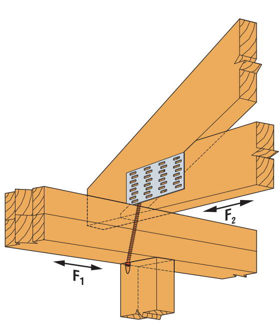
Optimal 22°
Óptimo 22°
30°
15°
0°
¼" max.

**Installation Angle Limit**

Límite del ángulo para la instalación

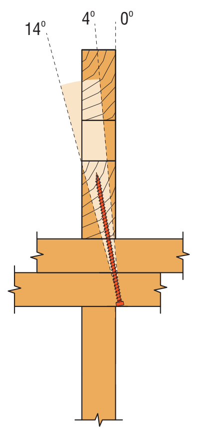
## Fasten from Wide Face of Stud

Sujete desde la cara ancha del montante




**Optional SDWC Installation — Wide-Face Installation Aligned with Stud**

Instalación opcional de SDWC — Instalación de cara ancha alineada con montante




**Allowable Installation Range**
*(rafter/truss offset from stud only)*

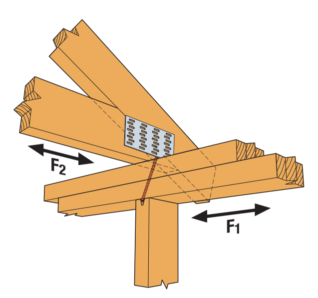
Rango de instalación permitido
*(solo desplazamiento de viga/cercha desde montante)*

# SDWC for Rafter/Truss with Quik Stik™



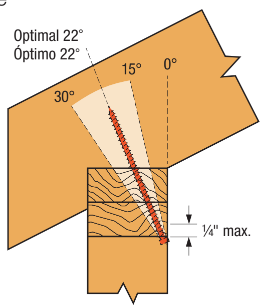

## Fasten from Narrow Face of Stud

Sujete desde la cara estrecha del montante




**Optional SDWC Truss Screw Installation — Truss Aligned with Stud**
*(rafter aligned with stud similar)*

Instalación de tornillos para cercha SDWC opcional – Cercha alineada con montante *(viga alineada con el montante similar)*

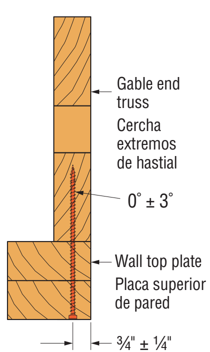



**Installation Angle Limit**

Límite del ángulo para la instalación

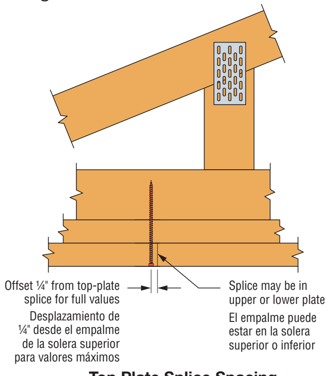
## Rafter/Truss Gable End Installation

Instalación en extremo de hastial de viga/cercha




**Installation Edge Distance**

Distancia al borde de instalación

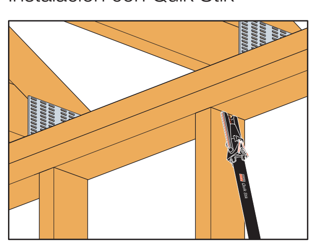


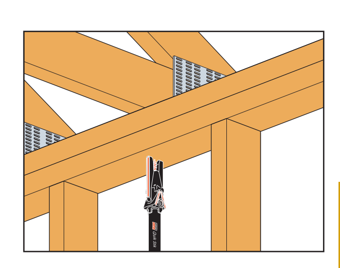

**Top Plate Splice Spacing**

Espaciado de empalme de la solera superior

## Installation with Quik Stik™

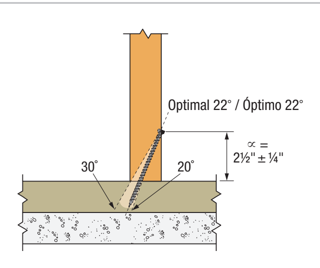
Instalación con Quik Stik





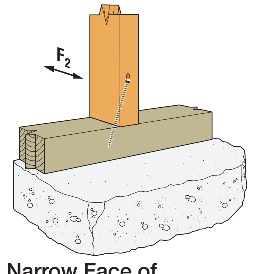
# Strong-Drive® SDWC TRUSS Screw



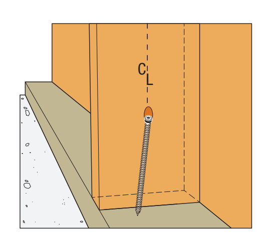

**Stud-to-Bottom Plate Connection Over Concrete/Masonry Foundation**

Conexión de montante a solera inferior sobre cimentación de concreto/mampostería



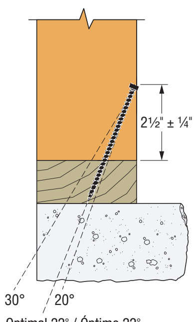

**Narrow Face of Stud-to-Bottom Plate**

Cara estrecha de montante sobre solera inferior



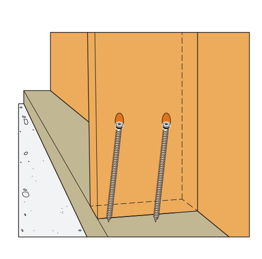

**One Screw**

Un tornillo



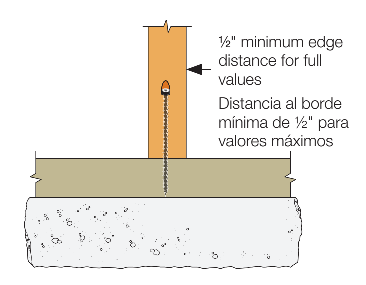

**Installation Angle Range**

Rango de ángulo de instalación



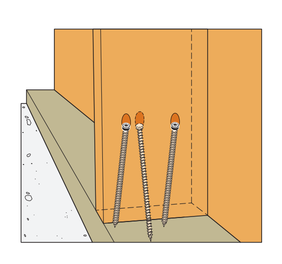
**Two Screws**

Dos tornillos




**Min. Edge Distance**

Distancia mín. al borde



**Three Screws**

Tres Tornillos

# Strong-Drive® SDPW DEFLECTOR Screw



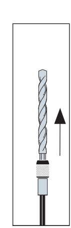

## Non-load-bearing partition wall applications

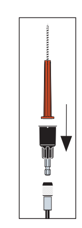
Aplicaciones de paredes separadoras que no soportan carga

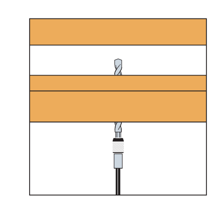


1 **Attach extension**

Inserte la extensión





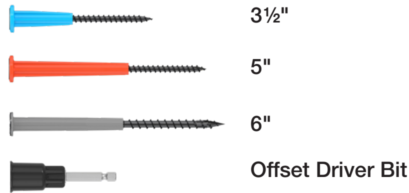


2 **Predrill into top plate only**

Perfore la solera superior solamente

3 **Select the SDPW Deflector Screw length for the thickness of the top plate assembly**

Seleccione el largo de tornillo deflector SDPW apropiado para el espesor del ensamble de solera superior



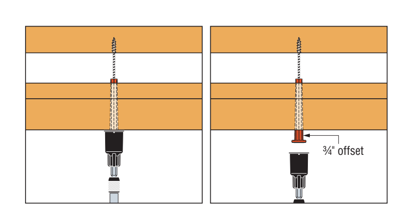
3½"

5"

6"

**Offset Driver Bit**

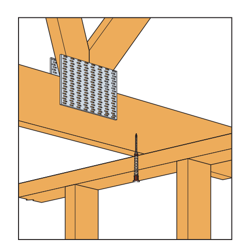
Punta para destornillador curvo






4 **Drive SDPW Deflector Screw through predrilled top plate and into ceiling joist**

Inserte el tornillo deflector SDPW a través de la solera superior perforada y en la vigueta de techo





5 **Typical SDPW Deflector Screw installation**

Instalación típica del tornillo deflector SDPW

# Strong-Drive® SDWF FLOOR-TO-FLOOR Screw




1

2

3

2" min.

4

TUW
**Take-up washer**
Arandela de recogida

**Locator tab**
Pestaña del localizador

**Inside Wall View**
Vista del muro desde dentro

5

**Outside Wall View**
Vista del muro desde afuera

925

**#9 x 2½" Strong-Drive® SD CONNECTOR Screw**
Tornillo para CONECTORES SD Strong-Drive de #9 x 2½"

# Strong-Drive® SDWF FLOOR-TO-FLOOR Screw




SDWF depth guide
*(included)*

6

**Outside Wall View**
Vista del muro desde afuera

7

**Inside Wall View**
Vista del muro desde afuera

3¼"

3½"

TUW

5"

SDWF

**Upper-wall, bottom-plate splice shown**
Se muestra el empalme de placa inferior a muro superior

**One Strong-Drive SDWF Floor-to-Floor screw must be installed between 4" and 12" on each side of any upper-wall, bottom-plate splice.**

Se debe instalar un tornillo de entre 4" y 12" en cualquier lado de cualquier empalme de placa inferior a muro superior.

Rim joist

1" min.

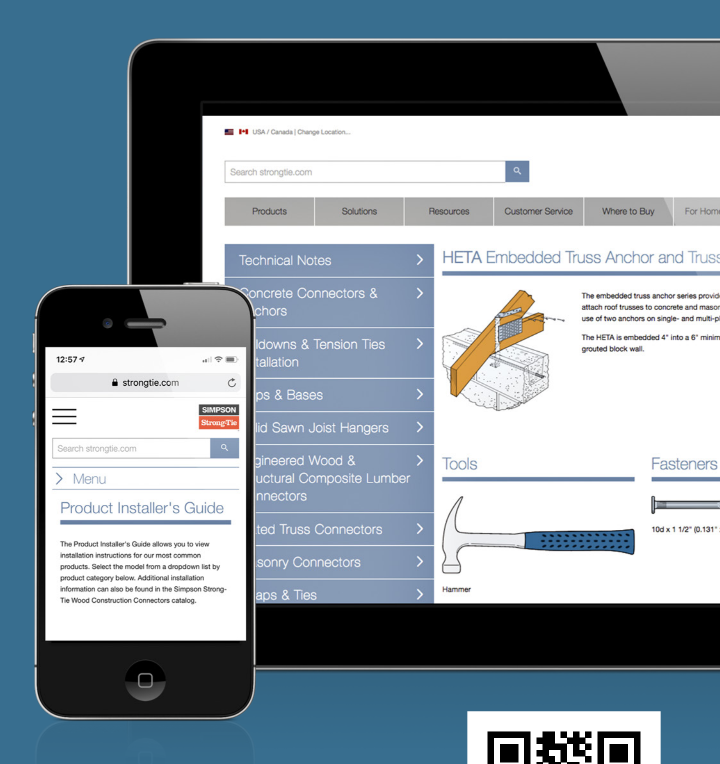
**4" min. end distance**
4" min. distancia al borde

**Lower-wall, top-plate splice shown**
Se muestra el empalme de placa superior a muro inferior

**Typical Strong-Drive SDWF FLOOR-TO-FLOOR and TUW Installation**
Instalación típica de tornillo para piso a piso SDWF Strong-Drive y TUW

# We now have a web version of this installer's guide.

Ahora tenemos una versión web de esta guía para el instalador.




Check it out at
**strongtie.com/installersguide**

Consúltela en strongtie.com/installersguide

S-C-INSTALL22 7/22 exp. 12/24